

Culture, Tourism, Europe and External Affairs Committee Comataidh Cultar, Turasachd, na h-Eòrpa agus Gnothaichean a-muigh



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# Culture, Tourism, Europe and External Affairs Committee

Remit: To consider and report on the following (and any additional matter added under Rule 6.1.5A)—

- (a) proposals for European Union legislation;
- (b) the implementation of European Communities and European Union legislation;
- (c) any European Communities or European Union issue;
- (d) the development and implementation of the Scottish Administration's links with countries and territories outside Scotland, the European Union (and its institutions) and other international organisations; and
- (e) co-ordination of the international activities of the Scottish Administration.
- (f) culture and tourism matters falling within the responsibility of the Cabinet Secretary for Culture, Tourism and External Affairs



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europe@parliament.scot



0131 348 5234

## **Committee Membership**



Convener
Joan McAlpine
Scottish National Party



Deputy Convener Claire Baker Scottish Labour



**Annabelle Ewing**Scottish National Party



**Kenneth Gibson** Scottish National Party



Jamie Greene Scottish Conservative and Unionist Party



Ross Greer Scottish Green Party



Stuart McMillan Scottish National Party



Tavish Scott Scottish Liberal Democrats



Alexander Stewart Scottish Conservative and Unionist Party

### **Executive Summary**

Fire Safety and the Mackintosh Building prior to the 2014 fire

The Committee notes that having clearly identified the risks posed by fire, via a number of reports directly commissioned by the GSA Board, in the period up to 2014, the GSA appears not to have addressed specifically the heightened risk of fire to the Mackintosh building. The Committee notes that the GSA Board consider that the fire safety measures that were taken went above and beyond the standards required. The Committee has been unable to obtain any evidence, beyond the decision to eventually install a water mist system in 2008, to support this position.

The Committee was not convinced that an adequate risk management approach had been taken by the GSA with specific regard to the Mackintosh building. The Committee would welcome clarification from the GSA as to the measures taken following the publication of the Buro Happold reports aside from the decision to eventually install a mist suppression system, which is considered later in this report.

It is not the role of the Committee to judge whether the Mackintosh building was compliant with the relevant fire safety standards and we expect the Scottish Fire and Rescue Service report to clarify this. However, from the reports commissioned by the GSA, it is evident that there were serious fire risks associated with the building.

The Committee recommends that the Scottish Government, SFRS and Historic Environment Scotland undertake a review of Category A Listed buildings with unique cultural or historic significance to ascertain if any additional interventions might be introduced to mitigate the risk of fire.

Timescale for implementation of a mist suppression system prior to the 2014 fire

The Committee would welcome clarification on what level of non-core funding has been received by the GSA from the Scottish Funding Council and the heritage purposes in relation to the Mackintosh building these funds were used for.

The Committee is concerned about the length of time taken for the mist suppression system to be installed in the Mackintosh building and questions whether more steps could have been taken in the interim period to protect the building.

The Committee notes that the approach taken by the GSA to fundraise in order to install a mist suppression system in the Mackintosh building was considered by some to be unusual. The Committee recommends that the Scottish Government undertakes an assessment of whether the current funding models available to HEIs to protect historic assets, such as the Mackintosh building, are adequate.

We recommend that the Scottish Government, through its agencies, review the adequacy of powers to compel owners to put in place enhanced fire safety measures; the public funding available; and the flexibility attached to that funding, to protect buildings of national significance.

#### Compartmentation

The Committee would welcome clarification from the GSA regarding the degree of compartmentation that was undertaken prior to the 2014 fire. The Committee notes that the difficulties associated with undertaking compartmentation resulted in the GSA being reliant upon the installation of a mist suppression system as the main response to the fire risk that had been identified in reports commissioned, in 2006 and 2008 respectively, by the GSA. Unfortunately, the mist suppression system had not been installed at the time of the 2014 fire for the reasons discussed earlier.

The Committee recognises the challenges associated with compartmentation in historic buildings but questions whether more could have been done during the construction phase following the 2014 fire. The Committee recommends that Historic Environment Scotland update guidance to reflect the need for improved compartmentation during construction.

#### Fire Safety during the Mackintosh Building Restoration Project

The Committee agrees that the preservation of life must be the ultimate priority during a fire incident. However, the Committee notes that there is a considerable risk of fire to historic buildings during restoration. Accordingly, the Committee recommends that the Scottish Government reviews, in consultation with relevant stakeholders, the legislation concerning safety in historic buildings during the construction phase of a project in order to identify any additional legislative measures that could be put in place to protect historic buildings as an asset.

The Committee notes the on-going dialogue between architect and Director of Professional Studies at the GSA, Gordon Gibb, and the Glasgow School of Art regarding the extent to which a mist suppression system was in place prior to the 2014 fire which could have been used during the construction period. This issue was raised toward the end of the Committee's inquiry and accordingly raised

issues which it has not been possible to fully scrutinise. The Committee expects the Scottish Fire and Rescue Service's inquiry to clarify this matter.

#### **Mackintosh Building Restoration Project: Procurement Process**

The Committee notes the GSA's approach to procurement and accepts that the school had oversight of the project. Notwithstanding these oversight arrangements, there was a second fire.

#### Site visits to the Mackintosh restoration project

The Committee considers that the GSA appear to have acted in accordance with common practice governing sites of this type but notes the commentary, following the 2018 fire, regarding site visits. The Committee considers that a greater degree of transparency and communication regarding how the site was being used during the restoration period would have lessened commentary of this kind. The issue of transparency and communication is considered later in this report.

#### Fire alarm on the night of the 2018 fire

The Committee notes the concerns raised regarding the fire alarm system at the Mackintosh site and reports which questioned whether it was operational on the night of the 2018 fire. The Committee is not in a position to determine whether the fire alarm system was switched on and fully operational on the night of the 2018 fire. The Committee understands that this issue will be considered as part of the ongoing SFRS investigation and the Committee awaits its findings.

#### Cladding used in the Mackintosh Building

The Committee notes the ongoing debate regarding the use of certain insulation materials. Given the concerns raised regarding the use of PIR insulation the Committee recommends that the Scottish Government, HES and SFRS take cognisance of the on-going debate on this issue and consider whether PIR insulation poses an unacceptable fire risk.

#### **Governance: Glasgow Art School Board**

The Committee is not convinced that the GSA gave sufficient priority to the safeguarding of the Mackintosh building. The Committee considers it would have been desirable for there to have been more specific expertise at Board level which reflected the importance of the Mackintosh building within the GSA estate.

The Committee is concerned that the listing system employed by HES covers a very large number of properties and contains no formal mechanism for recognising that there is a smaller sub-set of Category A Listed properties that are of significant cultural and historic importance to Scotland. The Committee recommends that HES and the Scottish Government consider a more tailored form of categorisation that would provide specific protection to buildings of unique cultural and historic significance.

#### The Dual Purpose of the Mackintosh Building

Despite the reassurances provided by the Glasgow School of Art with regards to the reviews put in place during the Mackintosh restoration project, the Committee is concerned by the lack of transparency regarding what specific measures were taken as a result of the reviews implemented following the 2014 fire. Additionally, the Committee considers that the GSA has been unable to articulate, in the public domain, what lessons were learned from the 2014 fire.

The Committee considers that the dual purpose of the Mackintosh building places a significant burden upon the building which increases the risk of fire occurring. However, the Committee notes that the Glasgow School of Art remains committed to the dual purpose of the building as both an education building and a museum.

The Committee recommends that HES and the Scottish Government review current guidance. This review should take account of whether historic buildings which have a dual function, such as the Mackintosh building, require additional guidance or support in cognisance of the additional fire risk which their dual-purpose presents.

#### The role of Historic Environment Scotland

The Committee notes the remit of Historic Environment Scotland is to have a leadership role in relation to the conservation and preservation of historic buildings. Despite this, the Committee considers that Historic Environment Scotland adopted an arms-length approach to the Mackintosh building with regards to safeguarding it from fire. Accordingly, the Committee recommends that the Scottish Government reviews the remit of Historic Environment Scotland and considers giving it extended statutory powers to intervene in cases where there is a risk to an asset of national significance.

#### **Trust**

The Committee notes the suggestion made by former directors Professors Inns and Jones that the Mackintosh building be placed in a Trust, with the Glasgow

School of Art and Dawson Stelfox taking a different view. The Committee notes that the Trust model is not a new suggestion and has been the subject of discussion over a number of decades as a means of enabling the GSA to focus on its core educational function whilst providing a means of protecting the Mackintosh building. The Committee considers that the GSA should give serious consideration to placing any future Mackintosh building in a Trust.

#### Transparency and Communication

The Committee notes the measures taken by the GSA to provide information to the Committee for the purposes of this inquiry. However, much of the information was not readily available on the GSA's website and had to be provided on request. For example, the GSA's website includes clear information about the restoration project itself but not the governance and decision-making processes underpinning much of this work. Furthermore, the Committee notes that the Charles Rennie Mackintosh Society could not readily find information pertaining to the substantial collections lost following the 2014 fire.

The Committee therefore recommends the GSA review how it presents information on its website to ensure that information is easily accessible. The Committee considers it is essential that a list of each item and its value from the Mackintosh collection lost in the 2014 and 2018 fires is published in a prominent location and in easily accessible formats.

Despite the reassurances provided by the GSA, the Committee recommends the GSA review how it disseminates information pertaining to the Mackintosh building to provide a clearer picture of its activities. In particular, the GSA Board should be more transparent regarding the processes which would be put in place regarding any future re-build of the Mackintosh building.

#### The Mackintosh building and the Local Community

The Committee welcomes the GSA's commitment to improving engagement with the local community but considers that more needs to be done to allay the concerns of local residents and rebuild the loss of trust. In particular, the Committee considers that the GSA cannot be truly effective as an institution until relations with the local community have been repaired.

The Committee recommends that the GSA establish a formal method of engaging with the local community on a permanent basis. At the same time, the GSA should put in place mechanisms to ensure that the local community be fully consulted on any proposals relating to the restoration of the Mackintosh building in the future.

#### Rebuilding the Mackintosh building

The Committee believes any discussion regarding the future of the Mackintosh building should fully consider the wider cultural and economic impact of the building. The Committee therefore recommends that the GSA undertake a full consultation exercise with regards to the future of the Mackintosh building, so as to fully acknowledge and understand differing viewpoints, before making a formal decision on whether or not to rebuild.

#### Conclusion

The Committee considers from the evidence gathered that the Mackintosh fires raise a host of associated issues which go beyond the cause of the fire itself and as such require further examination.

The Committee recommends that after the conclusion of the SFRS report, the Scottish Government should establish a public inquiry with judicial powers into the 2014 and 2018 fires at the Glasgow School of Art. The inquiry should also examine the risks posed by fire in historic buildings nationally and the ability of custodians to manage these properties, drawing on the lessons learned from the GSA.

## The Mackintosh Building: Timeline

1997 – 1999: GSA decide to embark on a phased programme of repair and conservation works to the Mackintosh building.

2004: Architects Page\Park develop a comprehensive Mackintosh Building Conservation & Management Plan.

2006 – 2009: The conservation and management plan leads to the establishment of the Mackintosh Conservation & Access Project.

2006: Heritage Lottery Fund approve a grant of £4,624,200 towards the Mackintosh Conservation and Access Project.

2006: Buro Happold FEDRA are commissioned by the GSA to carry out a Fire Protection Strategy Options Summary.

2008: Buro Happold FEDRA are commissioned by GSA to carry out a Property Protection Feasibility Study on the Mackintosh Building.

23 May 2014: First major fire at the Mackintosh Building.

18 June 2014: GSA launch a fundraising campaign.

26 November 2014: SFRS Investigation reveals cause of fire.

28 June 2016: Kier Construction awarded restoration contract.

15 June 2018: The Mackintosh Building suffers a second major Fire.

### Introduction

- Situated at the heart of the Glasgow School of Arts campus in Garnethill, the Mackintosh building is widely considered to be an architectural masterpiece of international cultural significance. First conceived by Charles Rennie Mackintosh in 1896, the building is recognised for its technical and aesthetic innovation which has inspired generations of students and visitors alike.
- 2. On the 23rd of May 2014, a fire damaged the west wing of the Mackintosh Building including some studios, the library and some archival stores. A number of Mackintosh artefacts were also lost in the blaze including items from the furniture collection which were in use in the Mackintosh Library and almost all the oil paintings on canvas in the School's collection. According to the Scottish Fire and Rescue Service's (SFRS) report, the 2014 fire was caused by a flammable propellent gas igniting after coming into contact with the hot surface of a projector in the building's basement. The materials and equipment were being used by a student in preparation for their degree show. The SFRS report also observed that a "major contributory factor for the fire spreading throughout the building was the number of timber lined voids and obsolete ventilation ducts running both vertically and horizontally throughout the building". ii Following the 2014 fire, the Glasgow School of Art (GSA) undertook a major restoration project of the building, launching an international funding appeal including significant monies provided by both the UK and Scottish governments.
- 3. On the night of 15 June 2018, the Mackintosh building suffered a second catastrophic fire, which caused significant damage to the building's interior as well as the exterior façades and gables. More than 120 firefighters were called to tackle the blaze, which spread to a neighbouring music venue, the O2 ABC and caused severe disruption to residents and businesses in the surrounding area.
- 4. The occurrence of two significant fires at the Mackintosh building in the space of four years has led to considerable debate regarding the effectiveness of GSA's management of the site. In the immediate aftermath of the 2018 fire, the Committee received a range of correspondence expressing concerns about the GSA's approach to the buildings conservation, how the School had engaged with the local community and regarding the future of the building.
- 5. Given the GSA is a Higher Education Institution (HEI) in receipt of public funding, it is appropriate to scrutinise these issues in order to ascertain whether there are any lessons that may be learned. Specifically, the Committee sought to focus upon the management and custodianship of the Mackintosh building and its collections.

i Scottish Fire and Rescue Service, Fire Investigation Report.
https://www.firescotland.gov.uk/media/708503/
redacted\_version\_fi\_wh\_gc\_006\_14\_\_\_21735141\_\_\_mackintosh\_building\_167\_renfrew\_street\_gla
ii Scottish Fire and Rescue Service, Fire Investigation Report.
https://www.firescotland.gov.uk/media/708503/
redacted\_version\_fi\_wh\_gc\_006\_14\_\_\_21735141\_\_\_mackintosh\_building\_167\_renfrew\_street\_gla

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- 6. To support its deliberations, the Committee held a series of four evidence sessions, hearing from the GSA Board; architects; contractors; Mackintosh scholars, fire safety experts; GSA alumni and Historic Environment Scotland. The Committees scrutiny was also supported through receipt of a wide range of written evidence. The Committee wishes to thank all of those who provided evidence.
- 7. Given the remit for the Committee's Inquiry, this report considers five main issues in relation to the Mackintosh building. These are as follows:
  - 1. Fire risk management and the Mackintosh building prior to the 2014 fire
  - 2. Fire Safety during the Mackintosh Building Restoration Project
  - 3. Governance issues
  - 4. The role of Historic Environment Scotland, and
  - 5. The future of the Mackintosh building

# Fire Safety and the Mackintosh Building prior to the 2014 fire

- 8. Historic buildings, such as the Mackintosh building, are awarded Category A Listed status because they can be characterised as sites of unique historical or architectural interest. The unique architectural features and historical nature of such buildings often mean they are especially susceptible to the risks posed by fire. As custodians of the Mackintosh building, the GSA are responsible for ensuring the building complies with the relevant fire and safety standards. In Scotland these standards are broadly defined in statute as follows:
  - 1. The Fire (Scotland) Act 2005
  - 2. The Construction (Design and Management) Regulations 2015 (CDM)
  - 3. The Health and Safety at Work Act
  - 4. The Building (Scotland) Regulations 2004 applicable at that time, unless exempt under schedule 1 of the regulations, and
  - 5. The Fire (Scotland) Act 2005 and its associated Regulations
- 9. Although the risks posed by fire can never be entirely mitigated, the Committee sought to understand the GSA's approach to risk management and to ascertain if, having identified specific risks to the Mackintosh building, the School had taken proportionate measures to adequately manage these risks.
- 10. Architectural firm Page/Park, who have been involved in the Mackintosh buildings conservation since the early 1990s, provided a helpful overview of the work carried out on the building in their written evidence<sup>iii</sup>. In 1993 Page/Park were commissioned by the GSA to undertake a building fabric condition survey which arose out of concerns that
  - for many years, the Mackintosh Building had not received the level of investment required to maintain and properly conserve a Category A listed building.

Source: Page\Park, 2018<sup>1</sup>

11. The Committee is aware that concerns regarding the buildings conservation and the risks posed by fire have been well documented by a range of sources. For example, in the mid-1990s independent fire safety expert Stewart Kidd, who chaired the UK working group on protecting historic buildings, visited the site with a senior member of staff from Historic Scotland. He observed, in written evidence to the Committee, regarding this visit to the building that they-

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both commented on the potential for serious fire spread throughout the building via the trunking. I recall the comment 'just like a very effective chimney' being agreed as an appropriate description of the hazard.

Source: Kidd, 2018<sup>2</sup>

- 12. The Committee also received evidence from GSA alumni that concerns regarding the buildings safety had been raised on a number of occasions. The former Head of Widening Participation at the GSA, Eileen Reid, stated in oral evidence to the Committee that-
  - For years, prior to the 2014 fire, the health and safety officer warned repeatedly—as did the Mackintosh curator—that there were significant risks.

Source: Culture, Tourism, Europe and External Affairs Committee 20 September 2018, Eileen Reid, contrib.  $24^3$ 

- 13. In 2005, the GSA reviewed their fire safety and prevention procedures for the Mackintosh building on the back of a wider Conservation and Management plan. The GSA's written submission to the Committee notes that at the time—
  - The fire prevention and safety measures in the Mackintosh Building were already compliant with what was permissible and suitable in listed buildings in general and in the Mackintosh Building in particular taking cognisance of its status as a working art school.

Source: GSA, 2018<sup>4</sup>

- 14. Despite the GSA's assurance that the building was compliant with the relevant fire safety standards, reports commissioned by the school clearly identified the potential risks posed by fire. In 2006, the GSA commissioned Buro Happold to conduct a Fire Protection Strategy to review what it called feasible options "for the long-term protection of the occupants, property and contents of" the Mackintosh building. This assessment included a summary of the risks posed by fire as follows:
  - Likelihood/ potential for fire occurring in building Medium High risk.
  - Potential for fire to remain undetected Medium High risk.
  - Potential for fire to grow/ spread beyond item first ignited High risk
  - Potential for fire to grow/ beyond room of origin High risk
  - Hazard posed by fire High risk
  - Consequences in the event of fire spreading High\_v
- 15. Buro Happold emphasised the risk of fire to the Mackintosh building and stated that-

iv Glasgow School of Art, Written Submission, p.8. <a href="https://www.parliament.scot/">https://www.parliament.scot/</a> S5\_European/Meeting%20Papers/20181112\_CTEEA\_PublicMeetingPapers.pdf

v Glasgow School of Art, Written Submission, Fire Protection Strategy Options Summary, p.6. <a href="https://www.parliament.scot/S5\_European/Meeting%20Papers/">https://www.parliament.scot/S5\_European/Meeting%20Papers/</a>
20181112 CTEEA PublicMeetingPapers.pdf

Due to the historic nature and value of the property and many of its contents, a fire poses a great threat.

Source: GSA, 2018<sup>5</sup>

- 16. Furthermore, Buro Happold went on to state in the review document that—
  - Many of the existing features / operational procedures within the building fail to comply with modern fire safety requirements/ legislation and could potentially cause, or contribute significantly to a fire within the building.

Source: GSA, 2018<sup>6</sup>

- 17. Following the 2006 review, Buro Happold were again commissioned by the GSA to carry out a Property Protection Feasibility Study on the Mackintosh Building which was designed to consider the options available to improve fire protection within the building. The Study, published in 2008, concluded that "only water mist suppression remains a viable option at this point in the assessment". Following the issue of the Property Protection Feasibility Study, the GSA convened a workshop with Historic Scotland, Page\Park and FEDRA to share concerns and potential solutions. As Page/Park noted in their written submission to the Committee—
  - All present agreed the importance of fire suppression, particularly given the huge investment already committed through the Conservation & Access Project.

Source: Parge\Park, 2018<sup>7</sup>

- 18. The Buro Happold report considered a wide range of fire protection methods. The assessment of the methods resulted in a water mist system being the only "potentially available" vi system for the building. Alternative systems, that were considered, including sprinkler systems, were ruled out for a variety of reasons including "buildability, usability and fitness for purpose" The Buro Happold report also cited that there were potential advantages associated with sprinkler systems namely the "low cost of agent" and that sprinkler systems were a "known technology". Specifically, sprinkler systems were ruled out in the Buro Happold report for the following reasons
  - reject due to plant / pipework space requirement, potential for significant loss of damage to contents, need for drainage and penetration difficulty.

Source: GSA, 2018<sup>8</sup>

19. Nevertheless, the Buro Happold report recognised that the use of water mist systems was a "quite new" ix technology that was subject to a lack of standards and guidance, research and testing, and experience in installation and use. Nevertheless, the report also considered that there were a number of advantages of water mist systems, including a reduction in water damage when the system is

vi Buro Happold report, 2008, p.33.

vii Buro Happold report, 2008, p.39.

viii Buro Happold report, 2008, p.29.

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activated and less plant and equipment space being required than is the case for traditional, water based methods. The report also noted that water mist systems had been installed in a number of historic buildings including:

- National Portrait Gallery, London, UK
- La Scala Opera House, Milan, Italy
- National Gallery of Art, Washington DC, USA
- 20. Given the importance of the decision to opt for a water mist system, it is worth detailing in full the concluding remarks of the Buro Happold report. The report stated—
  - The remaining option is that of water mist. This is a relatively new technology, but offers advantages in terms of plant space (primarily), buildability and aesthetics. It also offers advantages in the way it suppresses fires over both sprinklers and suppressant gas.

A system for the Mackintosh building will have to be fully engineered and will require that the building is extensively surveyed prior to final costing. Up to that point viability cannot be guaranteed. Given the newness of the technology, and the building specific system required, there will require to be considerable technical evaluation of the proposals.

Due to the variation of conditions and challenges throughout the building, the system(s) installed may be a mixture of protection principles e.g. object protection, local protection, zonal protection, total flooding. Total coverage, as would be the expected norm with sprinkler standards may not be achievable. This need not be viewed as a major deficiency however, as the way the water mist suppression / extinction mechanism operates, it will contain and envelope small fires, and works better as fires increase in size. As such small fires will be contained, and large fires should be put out. Also, in probability terms, it should be noted that this perceived 'partial coverage' is much preferable to no coverage, and will result in a positive change in the risk to the building and contents.

Source: Glasgow School of Art, 2018<sup>9</sup>

- 21. The Committee heard evidence that the risk of fire within the Mackintosh building was well known to staff and students of the art school. For example, Eileen Reid, former Head of Widening Participation at the GSA, in oral evidence to the Committee stated that—
  - Anyone who worked in the art school—I defy anyone to say otherwise—knew that the building was a risk. We all knew it. We used to talk about how many minutes we would have to get out. It was precarious, given 100 years of—not abuse—but the way that the building was used and the presence of flammable materials and the rest.

Source: Culture, Tourism, Europe and External Affairs Committee 20 September 2018, Eileen Reid, contrib.  $6^{10}$ 

- 22. Ms Reid went on to observe that—
  - We did not need reports or risk assessments—we did not even know that the ventilation ducts were not closed off—but we knew that it was a very hazardous building. Of course I am concerned about the iconic building, but it was a threat to life, too.

Source: Culture, Tourism, Europe and External Affairs Committee 20 September 2018, Eileen Reid, contrib.  $6^{10}$ 

- 23. The GSA strongly refuted the comments made by Ms Reid regarding the attitude of management within the GSA to fire risk in the Mackintosh building. The GSA stated, in written evidence, that—
  - We strongly rebut that allegation. We have always taken fire precautions seriously across the whole estate.

Source: Glasgow School of Art, 2018<sup>11</sup>

- 24. The Committee notes that having clearly identified the risks posed by fire, via a number of reports directly commissioned by the GSA Board, in the period up to 2014, the GSA appears not to have addressed specifically the heightened risk of fire to the Mackintosh building. The Committee notes that the GSA Board consider that the fire safety measures that were taken went above and beyond the standards required. The Committee has been unable to obtain any evidence, beyond the decision to eventually install a water mist system in 2008, to support this position.
- 25. The Committee was not convinced that an adequate risk management approach had been taken by the GSA with specific regard to the Mackintosh building. The Committee would welcome clarification from the GSA as to the measures taken following the publication of the Buro Happold reports aside from the decision to eventually install a mist suppression system, which is considered later in this report.
- 26. It is not the role of the Committee to judge whether the Mackintosh building was compliant with the relevant fire safety standards and we expect the Scottish Fire and Rescue Service report to clarify this. However, from the reports commissioned by the GSA, it is evident that there were serious fire risks associated with the building.
- 27. The Committee recommends that the Scottish Government, SFRS and Historic Environment Scotland undertake a review of Category A Listed buildings with unique cultural or historic significance to ascertain if any additional interventions might be introduced to mitigate the risk of fire.

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- 28. According to the GSA's written evidence to the Committee, the outcome of the 2008 Property Protection Feasibility Study was their decision to proceed with the installation of a "water mist fire suppression system" within the Mackintosh Building as an additional measure to protect life, the building and its contents. Based on the evidence provided by the GSA, the rationale for the installation of a system of this type appears to have hinged on it being the only viable means of protecting the building while also reducing the potential risk to the building's interior and collections. As Chair of the GSA's board, Dr Muriel Gray stated in oral evidence that Historic Environment Scotland would not permit the installation of a standard sprinkler system. Dr Gray explained the rationale for the decision to install a mist suppression system in the following terms—
  - We were not permitted to use a standard sprinkler system because it was a grade A listed building that contained Mackintosh artefacts and things that would have been destroyed by water. The only alternative was a mist suppression system. It was relatively new, but it was the best alternative and it was approved by Historic Environment Scotland as being safe to use.

Source: Culture, Tourism, Europe and External Affairs Committee 15 November 2018, Muriel Gray, contrib. 23<sup>12</sup>

- 29. In oral evidence to the Committee, Barbara Cummins, Director of Heritage at Historic Environment Scotland, commented on the advice given by HES in relation to fire safety measures. She stated that—
  - We cannot think of an instance in which we have advised against a suppression system, compartmentation or other measure appropriate for fire safety and said that it should not be allowed in a historic building. However, we cannot compel someone to do something in a timely manner. We were part of the discussions about what was appropriate for the GSA, but we were giving advice purely for our historic environment interests.

Source: Culture, Tourism, Europe and External Affairs Committee 17 January 2019, Barbara Cummins (Historic Environment Scotland), contrib. 118<sup>13</sup>

- 30. Liz Davidson, the senior project manager on the Mackintosh project, expanded on the decision to install a mist suppression system in the Mackintosh building. She stated—
  - It was chosen to protect its aesthetics, but also and very importantly—I think that this is in our report—we did not have the water to put in a sprinkler system. A sprinkler system uses a water tank of a size that would have drained down Garnethill.

Source: Culture, Tourism, Europe and External Affairs Committee 15 November 2018, The Convener, contrib. 34<sup>14</sup>

- 31. The position of the Art School management on the decision to install a mist suppression system reflect the conclusions made in the 2008 Property Protection Feasibility Study. The 2008 report stated that—
  - The configuration, use and condition of the existing Mackintosh Building means that all but one of the potential property fire protection options have been ruled out in terms of buildability, usability and fitness for purpose.

Source: Glasgow School of Art, 2018<sup>15</sup>

- 32. Given the decision of the GSA to opt for a mist suppression system and Dr Gray's statement regarding Historic Environment Scotland ruling out the installation of a standard sprinkler system, the Committee sought to understand if alternative methods for protecting the building might have been available. In oral evidence, fire safety expert Stephen Mackenzie confirmed that mist suppression systems were often preferred in historic buildings as they use less water and are therefore less damaging. However, he also noted that other options were available. He cited examples where alternative systems had been used in historic buildings as follows—
  - As far as historic buildings are concerned, there is, in the National Museum of the Royal Navy archives, not only a water-based suppression system but, in the unoccupied archive area, a gaseous suppression system, which, because it does not use water, is less damaging and makes recovery easier. That building has a mixed-mode system.

Source: Culture, Tourism, Europe and External Affairs Committee 17 January 2019, Stephen Mackenzie, contrib. 11<sup>16</sup>

- 33. Conservation architect Dawson Stelfox, in oral evidence, questioned the sequencing of measures taken by the GSA and the contractor. He suggested that the installation of a mist suppression system would normally take place after other fire suppression measures, such as compartmentation, had been undertaken. He stated that
  - it seems to me a big jump to immediately say that compartmentation could not be put in, because of the disruption to the historic fabric, and that the only option was a suppression system. Suppression is nearly the last thing that you would do, after you have compartmentalised to reduce the spread of fire through the building.

Source: Culture, Tourism, Europe and External Affairs Committee 17 January 2019, Dawson Stelfox, contrib. 12<sup>17</sup>

## Timescale for implementation of a mist suppression system prior to the 2014 fire

- 34. By the time of the 2014 fire, it was the Committee's understanding that a fire suppression system was in the process of being installed but that the installation of the system had not been completed. Given that the GSA had decided to install a mist suppression system in 2008, the Committee sought to understand why such a system was not in place at the time of the 2014 fire. As noted above, the installation of a mist suppression system was a relatively new and innovative approach. In this regard, the GSA stated that—
  - The installation of a "water mist fire suppression system" in a Category A listed building is far from straightforward. Our proposal involved the application of appropriate, highly specialist technology to the protection of a working Category A listed building from fire damage, for which there was very limited precedent.

Source: Glasgow School of Art, 2018<sup>18</sup>

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- 35. In response to questions from the Committee regarding the length of time taken for the installation of the mist suppression system, the GSA stated that the timescale for implementation of the system was attributable to two key factors, namely funding and the discovery of asbestos in the Mackintosh building. In relation to funding, Liz Davidson from the GSA stated—
  - The system had to be built and designed, funds had to be raised and we had to get listed building consent. It was an extraordinarily bespoke system—it was not a kit of parts. The main part of the timeline was for raising funds, because there are no public funds for a £500,000 mist suppression system. In our case, we were putting more than £1 million-worth of mist suppression into that building.

Source: Culture, Tourism, Europe and External Affairs Committee 15 November 2018, Liz Davidson, contrib.  $266^{19}$ 

- 36. According to the GSA, once they had obtained approval in principle to install the suppression system in 2009, they had to secure funding. Following unsuccessful claims to Historic Environment Scotland and the Heritage Lottery Fund, the GSA initiated a fund-raising exercise, which generated £520,000 between 2009 and 2012. The GSA highlighted, in their written submission, that although HES were supportive of their proposal they confirmed that they were only empowered to provide grant aid for repairs to listed buildings, not improvements. According to their written submission, HES has provided grant aid to the GSA amounting to a total of £1,226,844 since 1995. As Dr Muriel Gray pointed out in her oral evidence to the Committee, the suppression system was deemed an enhancement and funds could not therefore be secured through any other means than fundraising on the part of the GSA. She commented that—
  - The word here is "enhancement"; a fire suppression system would have been an enhancement to the building, rather than a necessity. I presume that that is why the administration at the time had to fundraise.

Source: Culture, Tourism, Europe and External Affairs Committee 15 November 2018, Muriel Gray, contrib. 68<sup>20</sup>

- 37. The Committee also received evidence that the GSA also received substantial funding from the Scottish Funding Council (SFC) over a considerable time period. Specifically, Stuart Robertson and Roger Bilcliffe stated, in a joint written submission, that—
  - GSA has for many years received non-core SFC museum funding specifically targeted towards the heritage of the Mackintosh building. This is currently set at £198K per year.

Source: Roger Bilcliffe, Stuart Robertson, 2018<sup>21</sup>

38. In oral evidence to the Committee, Dr Muriel Gray appeared to indicate that SFC monies had been used to purchase new buildings, such as the Reid building, to replace existing buildings. Dr Gray stated—

we were merely taking down buildings that were no longer fit for purpose and replacing them with a state-of-the-art wonderful building for the future education of Scottish and international students. Brilliantly, that was funded by the Scottish funding council.

Source: Culture, Tourism, Europe and External Affairs Committee 15 November 2018, Muriel Gray, contrib. 271<sup>22</sup>

The Committee would welcome clarification on what level of non-core funding has been received by the GSA from the Scottish Funding Council and the heritage purposes in relation to the Mackintosh building these funds were used for.

- 39. The Committee also understands that the GSA made funding applications to the Heritage Lottery Fund and the European Regional Development Fund and Historic Scotland—as it was at the time—and others, but that was for a conservation and access project. Because of the nature of these applications, the funds could not be redirected to support the installation of the fire suppression system.
- 40. Fire-safety experts, when asked by the Committee whether fund-raising was a common approach to raising monies for safety critical systems, viewed this as an unusual approach. When asked in oral evidence about the funding models available to custodians of historic buildings for fire safety, experts pointed to the need for incremental rather than comprehensive improvements to the building. As conservation architect Dawson Stelfox suggested in evidence
  - it seems that it was a case of all or nothing. Everything went on the mist suppression system; everything else was ruled out. It was a large, complex system that was expensive and took a while—rightly or wrongly—to put in.

Source: Culture, Tourism, Europe and External Affairs Committee 17 January 2019, Dawson Stelfox, contrib.  $63^{23}$ 

- 41. Mr Stelfox went on to explain that-
  - The principle of incremental improvement is a very important one, especially in dealing with historic buildings. The idea is not to let perfection get in the way of doing good. It is better to start to make small improvements such as compartmentation or fire stopping to improve the situation, even if the whole thing cannot be done at once.

Source: Culture, Tourism, Europe and External Affairs Committee 17 January 2019, Dawson Stelfox, contrib. 63<sup>23</sup>

42. When asked to clarify how grant conditions had been applied to the Mackintosh building, HES stated in oral evidence that the funds were made available for repair work to the existing building, and were part of a wider package of funding and had been contingent on adequate insurance cover being in place. In oral evidence to the Committee HES's Head of Grants, Thomas Knowles, commented on the relationship between HES and the GSA with regard to the Mackintosh building in the following terms—

We worked with the Glasgow School of Art on a wide-ranging repair programme, which was funded by multiple funders. The programme was so wide ranging that it could not be funded only by Historic Scotland, as the organisation was called at the time, because we have grant eligibility criteria and we can fund only repair work, not new interventions.

We were satisfied with our oversight of the project because systems were being put in place—including a fire suppression system, which was part of the wider project—and there was insurance. We were unable to fund those elements, because they were new interventions, but other funders were able to do so. When we considered the whole package, we were satisfied that there would be a safe and secure building at the end of the project. Unfortunately, we never got to that point.

Source: Culture, Tourism, Europe and External Affairs Committee 17 January 2019, Thomas Knowles, contrib. 202<sup>24</sup>

- 43. The Committee sought the perspective of HES with regard to whether HES funding conditions required to be more flexible where there is a clear need for greater protection of a historic asset. In response, HES's Head of Grants stated—
  - We will absolutely look at the lessons that are to be learned from the committee's findings and at whether we can put in anything else—in excess of what we already do—that looks at the project as a whole; what the end state of the project will look like; the sustainability of the organisations that operate the end product; the insurance during as well as after the construction phase; and the on-going maintenance of the grant-aided building once the project has been completed.

Source: Culture, Tourism, Europe and External Affairs Committee 17 January 2019, Thomas Knowles, contrib. 214<sup>25</sup>

- 44. The Committee also questioned why, given the clear need for a suppression system, the GSA had committed significant funds to the development of the school's Reid building, and other parts of the campus, while also fundraising for the costs of the suppression system. In response the GSA stated, in supplementary written evidence to the Committee, that—
  - The Reid Building was developed as a replacement for two buildings that were no longer fit for purpose and was therefore important to the continuing educational function of the GSA.

Source: Glasgow School of Art, 2018<sup>26</sup>

- 45. The GSA also clarified that funding for the Reid building was provided by the SFC and the funding received was restricted to the purpose for which it is provided. It was therefore not open to the GSA to divert monies received from the SFC to the development of the Reid building to finance a mist suppression system in the Mackintosh Building.
- 46. As noted above, the discovery of asbestos within the Mackintosh building also extended the timescale for installation of a mist suppression system. Work on the suppression system began in July 2013, but was suspended when the contractor discovered asbestos, the removal of which, the GSA stated, posed an unacceptable

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risk when students, staff and visitors were still using the building. Therefore, the GSA decided to remove the asbestos from the building during the summer of 2014 to allow for its safe removal. When asked about the timeframes associated with the installation of the mist suppression system and the dangers posed by asbestos, fire safety expert Stephen Mackenzie stated—

I question the timeframe for implementing the suppression system before 2014, and I do not buy the argument that there was asbestos. For a building constructed before 2000, you are required to have an asbestos plan; that allows you to anticipate where it will be, and you can employ specialist contractors to work in asbestos-controlled areas. I therefore categorically refute that position.

Source: Culture, Tourism, Europe and External Affairs Committee 17 January 2019, Stephen Mackenzie, contrib. 11<sup>16</sup>

- 47. In response, the GSA disputed Mr Mackenzie's assertion and stated that
  - asbestos plans, surveys and registers will often not be able to identify or anticipate all asbestos in a building, particularly for an historic building such as the Mackintosh Building. Asbestos is often hidden with the construction and behind finishes and only comes to light when works are underway and areas are opened up. This was precisely the situation with the Mackintosh Building.xi

The Committee is concerned about the length of time taken for the mist suppression system to be installed in the Mackintosh building and questions whether more steps could have been taken in the interim period to protect the building.

The Committee notes that the approach taken by the GSA to fundraise in order to install a mist suppression system in the Mackintosh building was considered by some to be unusual. The Committee recommends that the Scottish Government undertakes an assessment of whether the current funding models available to HEIs to protect historic assets, such as the Mackintosh building, are adequate.

We recommend that the Scottish Government, through its agencies, review the adequacy of powers to compel owners to put in place enhanced fire safety measures; the public funding available: and the flexibility attached to that funding, to protect buildings of national significance.

xi Glasgow School of Art, Supplementary Written Submission, p.5.<a href="https://www.parliament.scot/S5\_European/Inquiries/CTEEA 20190128 GSASuppSub 17JanCtte.pdf">https://www.parliament.scot/S5\_European/Inquiries/CTEEA 20190128 GSASuppSub 17JanCtte.pdf</a>

### Compartmentation

- 48. Compartmentation refers to the practice of inhibiting rapid *fire* spread within a building by reducing the fuel available in the initial stages of a fire xii. This approach is used by architects as a means of reducing the likelihood of fire spreading through ducts and vents within a building. The potential risk for fire to grow and / or spread, beyond the item first ignited, was a risk identified in the 2006 Fire Protection Strategy Options Summary produced by Buro Happold. Following the 2014 fire, the Scottish Fire and Rescue Service's (SFRS) Fire Investigation Report found that—
  - A major contributory factor for the fire spreading throughout the building was the number of timber lined voids and obsolete ventilation ducts running both vertically and horizontally throughout the building.

Source: Scottish Fire and Rescue Service, n.d.<sup>27</sup>

- 49. The Committee sought to ascertain why, given these risks were identified at an early stage, those involved in the buildings maintenance and restoration had not addressed this issue before the 2014 fire. The 2008 Buro Happold report commented that the "wholesale application of such a policy would however be virtually impossible given the current structure and the amount of compartmentation and fire stopping which would be required"xiii. The 2008 report also commented, regarding the feasibility of compartmentation within the Mackintosh building, that—
  - If funds were available to carry out these works, it is highly unlikely that permission could be obtained to carry them out given the buildings listed status. Even if compartmentation were applied, the Client would have to consider total loss of some of the larger spaces as the accepted outcome of this type of strategy.

Source: Glasgow School of Art, 2018<sup>28</sup>

- 50. In supplementary written evidence, the GSA suggested that a degree of compartmentation had been undertaken prior to the 2014 fire. The GSA stated that—
  - Compartmentation had already been introduced where practical into the building prior to the 2014 fire. Further, the Mackintosh Building already met acceptable standards in relation to fire safety prior to the 2014 fire, but the GSA proactively decided to add an additional layer of protection, beyond that which is present in most historic buildings across the UK. In light of the professional advice received by the GSA, and other relevant factors, it is satisfied that the decision to pursue the water mist suppression system was the correct one.

Source: Glasgow School of Art, 2018<sup>29</sup>

xii Scottish Government, Building Standards guidance. https://www2.gov.scot/resource/buildingstandards/2017NonDomestic/chunks/ch03s02.html xiii Buro Happold report, 2008, p.25.

The Committee would welcome clarification from the GSA regarding the degree of compartmentation that was undertaken prior to the 2014 fire. The Committee notes that the difficulties associated with undertaking compartmentation resulted in the GSA being reliant upon the installation of a mist suppression system as the main response to the fire risk that had been identified in reports commissioned, in 2006 and 2008 respectively, by the GSA. Unfortunately, the mist suppression system had not been installed at the time of the 2014 fire for the reasons discussed earlier.

- 51. The Committee sought views on whether it was feasible to undertake compartmentation within the Mackintosh building during the construction period after the 2014 fire. In response, Kier Construction who were responsible for the reconstruction of the Mackintosh building post-2014 emphasised that improving "the compartmentation of the building" was one of a range of fire-safety measures taken during the construction phase of the project. The representatives of Page / Park architects were asked whether compartmentation was taken early in the construction process to address the issue of the ducts which had facilitated the spread of the 2014 fire. In response, David Paton stated—
  - That was not done at that stage, because the ducts were to be used for the routing of all the services and, at the end of that process, they were to be fire stopped. That was part of the five-point plan.

Source: Culture, Tourism, Europe and External Affairs Committee 25 October 2018, David Paton, contrib. 190<sup>30</sup>

- 52. David Page further elaborated on this issue and commented that—
  - It still remained a conservation project, so we were unable to build new ducts or distribution systems. We had to use the circulation that was there.

Source: Culture, Tourism, Europe and External Affairs Committee 25 October 2018, David Page, contrib. 192<sup>31</sup>

- 53. Dawson Stelfox highlighted the complex nature of undertaking compartmentation during construction in the following terms—
  - It is important to put on the record that none of this is easy to do. Every historic building is unique. A lot of these ducts and things that go through the building will not be recorded in drawings and will be finding their way through fixed hollowed walls. Even finding the routes of all the voids can be difficult and sometimes, because it is difficult, it becomes expensive and it gets ignored.

Source: Culture, Tourism, Europe and External Affairs Committee 17 January 2019, Dawson Stelfox, contrib.  $4^{32}$ 

However, Mr Stelfox did consider, based on the evidence that the Committee had received, that there could have been a greater emphasis upon compartmentation during the reconstruction of the Mackintosh building. He stated that—

What is missing from what I have seen so far are measures to stop fire spread during the construction process. Those ducts were not compartmented. In fact, one of the Kier Construction representatives said that it was impractical to do so during the process.

It is not easy to do. The Kier representatives said that those ducts were going to be used for services distribution: cables and pipes were going to be put in them during the works. Fire stopping during construction is not therefore easy because it might be continually disrupted and have to be put back in place. I would suggest that there has not been enough focus on achieving compartmentation fire stopping during the construction process.

Source: Culture, Tourism, Europe and External Affairs Committee 17 January 2019, Dawson Stelfox (Consarc Design Group Ltd), contrib. 2<sup>33</sup>

The Committee recognises the challenges associated with compartmentation in historic buildings but questions whether more could have been done during the construction phase following the 2014 fire. The Committee recommends that Historic Environment Scotland update guidance to reflect the need for improved compartmentation during construction.

## Fire Safety during the Mackintosh Building Restoration Project

- 54. Both the Glasgow School of Art and contractors during the construction phase of the Mackintosh building, post-2014, stressed the extensive measures that were put in place to ensure fire safety. Dr Muriel Gray commented in this regard that
  - we took every possible step above and beyond the standard in specifying the contract terms, including fire precautions, for the Mackintosh building restoration project. Far from standing back complacently, we maintained day-to-day supervision of the project works, both on and off site.

The tragedy is that just before the fire the contractor was doing an absolutely stunning and beautiful job.

Source: Culture, Tourism, Europe and External Affairs Committee 15 November 2018, Muriel Gray (Glasgow School of Art), contrib. 4<sup>34</sup>

55. David Paton, from Page / Park architects, emphasised in oral evidence to the Committee the change in approach with regard to fire safety which resulted from the 2014 fire. He stated that—

After the 2014 fire, we had the chance to properly consider what had happened and to put in place a comprehensive system for the building when in use.

Working with our fire consultants, we identified five key targets. As you can imagine, those were to improve the compartmentation of the building; to install fire stopping within all the ducts and risers; to install a state-of-the-art detection system through the building; to install a mist suppression system, which had been commenced previously; and to install a smoke-extract system. Protecting this most important building involved not a single measure but a whole range of measures.

Source: Culture, Tourism, Europe and External Affairs Committee 25 October 2018, David Paton, contrib. 19<sup>35</sup>

- 56. Conservation architect Dawson Stelfox also considered that effective fire protection measures would have been in place if the post-2014 restoration project had been completed. However, he also emphasised the significant risk of fire to historic buildings during construction. He observed that—
  - It is a very big if in the circumstances, but if the building had been finished, it would have had good fire protection measures—compartmentation and fire suppression—built into it. The tragedy is that the building did not get finished; therefore the gap in the client's requirements, the scientific requirements and the contractor's requirements was in protecting the asset during the construction period. We have the evidence from the previous fire, and evidence from all the fires that have taken place during construction in historic buildings, and we understand that the highest risk for a historic building is during the construction period. I would suggest that the gap in provision was the lack of attention to the protection of the heritage asset from fire during construction.

Source: Culture, Tourism, Europe and External Affairs Committee 17 January 2019, Dawson Stelfox, contrib.  $93^{36}$ 

Mr Mackenzie drew attention to the significant risk of fire during construction, noting that "60 per cent of construction fires happen when the building is 90 per cent complete" In oral evidence Dawson Stelfox set out the statutory position but questioned the suitability of the fire safety assessments carried out during the construction phase of the project—

The statutory position is that a fire risk assessment has to be done, but the focus of that assessment is on life safety and getting people out of the building in time, not on asset safety or protecting the building. I suggest that it is worth the committee looking at changes to requirements in fire safety assessments during the construction period to take into account fire asset safety and fire spread through the building.

Source: Culture, Tourism, Europe and External Affairs Committee 17 January 2019, Dawson Stelfox (Consarc Design Group Ltd), contrib. 2<sup>33</sup>

57. The fire and security consultant Stewart Kidd made a similar point in written evidence to the Committee. He noted that—

The legal duties in respect of fire safety on construction sites are set out in the Construction (Design and Management) Regulations 2015. The enforcing authority for these regulations is the HSE and, as might be expected, the Regulations focus on the safety of operatives if there is a fire.

These very basic requirements have been successful in protecting site operatives but less successful in preventing fires but not at all successful in protecting buildings under construction or being refurbished as the litany of disastrous site fires proves.

Source: Stewart Kidd, 2018<sup>37</sup>

- 58. This perceived gap in the statutory position with regard to the protection of an asset during the construction period led some witnesses to suggest that a greater emphasis should be placed on protection of the asset. Dawson Stelfox summarised this perspective in the following terms—
  - A focus on the importance of the historic building asset in a fire risk assessment is currently lacking in the guidance and legislation. Instead, the focus is on life safety, both during and after construction. That mindset is starting to change and we need to think about how we use fire safety measures and audits to protect historic fabric in the long term. That is not a requirement at the moment; individual owners might consider it as such, but it is not a statutory requirement.

Source: Culture, Tourism, Europe and External Affairs Committee 17 January 2019, Dawson Stelfox, contrib. 14<sup>38</sup>

- 59. Stephen Mackenzie suggested that legislation should be strengthened to better protect historical assets. He commented that
  - our legislation needs to be reinforced in relation to historic building protection, the main building standards review that Dr Paul Stollard is doing following the Grenfell tower fire and the on-going Hackitt review. There are ways to do that. We could have, say, an integrated safety and resilience standard for systems, operation and guidance et cetera. We also need to make a decision whether we are prepared to lose historic and cultural assets or whether there is more that we can do.

Source: Culture, Tourism, Europe and External Affairs Committee 17 January 2019, Stephen Mackenzie, contrib. 21<sup>39</sup>

- 60. The Committee sought the perspective of HES regarding the need for legislation to be modified to better protect historic buildings during construction. Barbara Cummins, Director of Heritage at HES, observed that—
  - Increasingly, there is an understanding with the historic environment, and with collections associated with buildings such as museums, that there is a need to protect those as assets in their own right. I am not sure where the compulsion would exist to change the focus so that it is also about protecting the building.

Source: Culture, Tourism, Europe and External Affairs Committee 17 January 2019, Barbara Cummins, contrib. 136<sup>40</sup>

- 61. With regards to the preservation of the asset during the construction period, the GSA stressed that the contractor during the restoration of the Mackintosh building, had complied with all the existing legislation. The GSA stated that—
  - It is a requirement of the Contract to comply with the Joint Fire Code, which requires a risk based approach to fire safety. It is also a requirement of the CDM 2015 Regulations that fire safety measures are in place and adopted during the contract works" period. In June 2016, Kier (Construction) Scotland Limited (at the point of their appointment) produced a "Fire and Emergency Plan" in accordance with those requirements with their plan reviewed by Scottish Fire and Rescue Service, Glasgow City Council Building Control, our insurers and The Glasgow School of Art and was revised by Kier Construction (Scotland) Ltd in response to feedback as confirmed by Mr McQuade in evidence.

Source: Glasgow School of Art, 2018<sup>41</sup>

- 62. The Committee notes the GSA's comments about the Fire and Emergency Plan produced by Kier Construction but questions the SFRS's involvement in reviewing the plan. In a statement, the SFRS clarified that-
  - It is solely the responsibility of the principal contractor to produce a fire and emergency plan. Engagement and consultation with the Scottish Fire and Rescue Service (SFRS) is not a statutory requirement of this process. Furthermore, SFRS does not approve or validate fire and emergency plans.
- 63. The Committee agrees that the preservation of life must be the ultimate priority during a fire incident. However, the Committee notes that there is a considerable risk of fire to historic buildings during restoration. Accordingly, the Committee recommends that the Scottish Government reviews, in consultation with relevant stakeholders, the legislation concerning safety in historic buildings during the construction phase of a project in order to identify any additional legislative measures that could be put in place to protect historic buildings as an asset.
- 64. The Committee also considered whether a mist suppression system could have been installed during the restoration of the Mackintosh building. The GSA emphasised, in supplementary written evidence, that it was not considered appropriate to undertake this process. The GSA stated that—

To the best of the GSA's knowledge, having sought expert advice, there is no temporary fire suppression system suitable for a building and project of the scale and complexity of the Mackintosh Building and the Mackintosh Restoration Project that could have been installed during the construction period.

It is considered that the extent of restoration works could not have been carried out with a live fire suppression system being present as it would need to have the coverage, certification and equipment equivalent to that of a permanent system. The significantly higher risk of accidental flooding/water damage is also likely to be too great for an insurer to accept. These are all reasons why it is highly unusual to have an operational fire suppression system present during construction works of this scale and complexity, as the Committee has heard from various sources. The GSA is not aware of any example of a system that has been used that would have been relevant to the Mackintosh Restoration Project.

Source: Glasgow School of Art, 2018<sup>42</sup>

- 65. This position was questioned by Mr Stephen Mackenzie who considered that a phased installation of a sprinkler system would have been appropriate. He observed that—
  - Coming back to sprinkler systems, I question why the installation was not phased, given that the building, in its original design and construction, was in two phases itself. The building lends itself to the undamaged wing and the damaged wing being treated as two separate entities and linked back to the new tank areas.

Source: Culture, Tourism, Europe and External Affairs Committee 17 January 2019, Stephen Mackenzie, contrib. 11<sup>16</sup>

- 66. With regard to the phasing in of fire safety measures during a construction period, best practice guidance is provided by the Fire Protection Association and this guidance is commonly referred to in insurance contracts relating to construction sites. The best practice guidance is termed the "Joint Code of Practice on the Protection from Fire of Construction Sites and Buildings Undergoing Renovation", (commonly referred to as the Joint Fire Code), and it states that—
  - The client, designers or principal designer should ensure, so far as reasonably practical, that the project is designed and planned in conjunction with the contractor and their programming of the works to achieve the early installation and operation of... automatic sprinkler and other fixed firefighting installations where planned...

Source: Health and Safety Executive, 2015<sup>43</sup>

67. The GSA stated, in supplementary written evidence, that both the GSA and Kier Construction had acted fully in accordance with the provisions of the Joint Code of Practice. The GSA stated that—

so far as was reasonably practical, the project was designed and planned in conjunction with the contractor and their programming of the works to achieve the early installation and operation of the automatic sprinkler and other fixed fire-fighting installations where planned". Accordingly, the Low Pressure Mist Suppression system would have been commissioned as soon as it had been completed, pressurised and commissioned (i.e. ahead of the completion of the project overall).

Source: Glasgow School of Art, 2018<sup>44</sup>

- 68. In addition, the GSA also provided a summary of the measures included within the fire safety plan for the construction site. These included-
  - A 24 hour manned security presence
  - · Hard wired smoke detection system
  - · Manual call points at each level
  - Hot works policy
  - Full Health and Safety provisions including PPE for all visitors
  - Scaffold alarm
  - CCTV coverage
  - · Fire extinguishers at all levels
  - Enhanced compartmentation including new fire doors to corridors and cross routes
  - · Induction processes for all visitors to site
  - CSCS (Construction Skills Certification Scheme) certification for all permanent personnel including GSA staff<sup>xvi</sup>
- 69. The Committee received evidence from architect and Director of Professional Studies at the GSA, Gordon Gibb, xvii xviii which suggested that there was a fire suppression system which was 95 per cent installed from 2014 and capable of functioning. In Mr Gibb's view this system could have been commissioned very easily and could have provided fire protection all through the construction work undertaken by Kier Construction from 2016 onwards. Mr Gibb stated—

xvi Glasgow School of Art, Written Submission, p2/3.

xvii Gordon Gibb, Written Submission. https://www.parliament.scot/S5\_European/Inquiries/Supplementary\_GordonGibb\_20190116.pdf

xviii Gordon Gibb is a part time member of staff, working in the professional sector; a practising architect; former Vicechair of the Architect's Registration Board, an ARB Investigations Panel member, and an Expert Witness in the field of professional liability, building failures and claims analysis.

there was a fire suppression system in place in the building, 95% installed from 2014 and capable of functioning, that could have been commissioned very easily to provide fire protection all through the works undertaken by Kier from 2016 onwards. It was not commissioned and was ripped out, even though the building was occupied by GSA staff and contractors, and even though the building was known to be at a high risk from fire, because of its construction. A new system was then installed much later, with that work starting 18 months after commencement of Kier's works on site.

If it was felt appropriate to replace the system installed in 2014 with a new system with greater functionality, the new and old systems could have and should have been run in parallel to provide coverage of the building site until the new system was ready to be commissioned, at which time the old system could be removed or taken off line. Such action would be in accordance with the Joint Fire Code and would have saved the building on 15 June 2018, either by inhibiting its spread until such time as SFRS could attend, or by extinguishing it.

Source: Gordon Gibb, 2019<sup>45</sup>

- 70. In response, the GSA provided supplementary written evidence clarifying that the mist suppression system was still in the process of being installed before the 2014 fire. This included the installation of the central area pipework and pumps and the system had not been pressurised, tested and commissioned. They went on to explain that following the 2014 fire a significant section of installed pipework within the west side of the Mackintosh building was destroyed and the remainder of the pipework was damaged or corrupted by dust. However, the GSA did state that they had considered the re-use of the surviving pipework with their advisers. However, it had been established that—
  - much of the original and surviving pipework was incapable of re-use in situ without almost complete re-figuration, re-fabrication, re-installation and redesign;
  - to do so would have taken a comparable timeframe as installing an enhanced system. The Low-Pressure Mist System - which in negotiations with our insurers and specialist consultants was determined to provide the optimum level of protection for the building - took into account the advances made in mist suppression technology
  - it would not have been possible to try and rebuild the damaged system (which
    was extremely unlikely to achieve certification or warranty) in parallel with the
    installation of a new and improved system
- 71. In a further response, Mr Gibb provided additional written evidence to the Committee in which he took issue with the GSA position outlined above. Mr Gibb stated that—

The GSA's references to reconfiguration and redesign, and to a resultant reinstallation, do not refer to work needed to be done to make the original system function. They refer to redesign work undertaken by the GSA after the 2014 fire, due to the fact that they took the opportunity to change the layouts of some of the spaces in the building. If the original system had been retained, subsequent changes to its layout may have been found necessary. Such changes could have been assembled remotely, before connection section-by-section into the original live system. Other than for short periods of down-time, such later changes would not impact upon the capability of the original system to provide fire protection. The certified designer/installer of the original high-pressure mist system has confirmed that Kier sought a tender price from them, which was not accepted.

Source: Gordon Gibb, 2019<sup>46</sup>

- 72. The concluding section of Mr Gibb's written submission provides a summary of his position as follows-
  - The GSA instructed that a viable and near complete mist fire suppression system be stripped out and delayed the commencement of installation of an alternative. By so doing, the GSA failed to comply with the Joint Fire Code. Because of GSA's actions, the building did not benefit from the protection that a mist fire suppression system would have offered against the fire on 15 June 2018.

Source: Gordon Gibb, 2019<sup>47</sup>

73. The Committee notes the on-going dialogue between architect and Director of Professional Studies at the GSA, Gordon Gibb, and the Glasgow School of Art regarding the extent to which a mist suppression system was in place prior to the 2014 fire could have been used during the construction period. This issue was raised toward the end of the Committee's inquiry and accordingly raised issues which it has not been possible to fully scrutinise. The Committee expects the Scottish Fire and Rescue Service's inquiry to clarify this matter.

## Mackintosh Building Restoration Project: Procurement Process

74. At the time of the 2018 fire, the Mackintosh building was under the operational control of Kier Construction Limited, the primary contractor responsible for the restoration project. The Committee understands that under Scots Law the employer, in this case the GSA, is obliged to give possession of the site to the contractor in accordance with the contract. This is required in order that the contractor has full control of the site in order to comply with their obligations and duties under the contract and in terms of any relevant statutory requirements.

- 75. Thus, the contractor having been given operational control of the Mackintosh site is responsible for ensuring the security of the site and that the health and safety procedures comply with the relevant standards. In oral evidence to the Committee, it was suggested by architect Malcolm Fraser that there had been a failure on the part of the contractor to properly execute the fire safety plan. The proper execution of the fire safety plan forms part of the contractual obligation underpinning the restoration contract. Any negligence on the part of the contractor, which might have contributed to the 2018 fire, would be a matter for the SFRS and is therefore beyond the scope of the Committee's inquiry. Instead the Committee focussed on the tendering process and contract underpinning the restoration project.
- 76. According to the GSA's written submission<sup>xix</sup>, Keir Construction was awarded the contract for the Mackintosh restoration project following a procurement process in accordance with Contracts (Scotland) Regulations 2012. The contract in question was a "Standard Building Contract with quantities for use in Scotland". According to the GSA, this type of contract requires the employer to stay closely involved in the project throughout the construction process. The scope of the tender also included a series of five targets established after the 2014 fire which were based upon the change in circumstance at the site given that the building was now vacant. These targets were-
  - 1. To improve fire compartmentation within the building;
  - 2. To install fire stopping within all ducts and rises;
  - 3. To install a state of the art fire detection system;
  - 4. To install a water mist fire suppression system; and
  - 5. To install a smoke extract system.
- 77. In addition to the targets set out above, the provisions of the tender placed responsibility on the contractor to prepare a detailed fire and safety plan to protect the building during the construction phase. This plan was prepared in compliance with the Joint Code of Practice and the relevant provisions of the Construction Design and Management (CDM) 2015 Regulations. With regards to the GSA's oversight and involvement during the renovation, the contract included a clause (2.1A) setting out the overriding principle of collaboration and a number of other provisions for the contractor to-
  - Provide monthly reports
  - Include sub-contractors in project planning and risk allocation of the project;
  - Provide Building Information Modelling (BIM), which is used to identify and design clashes and to provide a useful record for the maintenance of the building once operational; and
  - Maintain an early warning mechanism and risk register.
- 78. As the GSA state in their written submission, this management process operated to-

ensure that there was a forum where the GSA Mackintosh Restoration Project Team could meet with the contractor to identify, mitigate and eliminate risk.

Source: Glasgow School of Art, 2018<sup>48</sup>

- 79. The GSA's written submission<sup>xx</sup> also includes a detailed overview of the relevant structures in place to monitor the works as they progressed. These structures included-
  - The GSA Board established a project governance structure to provide effective oversight. This included the establishment of a new Mackintosh Restoration Committee which reported directly to the Board.
  - A Mackintosh Operations Group was set up to manage the project's operational matters and met every three weeks.
  - · A dedicated internal project management team was put in place
  - Other project meetings supporting the delivery of the project included technical site meetings, design team meetings with the project architects and GSA's internal project managers and regular one-to-one meetings involving the internal project team, Project Sponsor and Finance team and contractor.
- 80. The GSA's written evidence also includes details of the expert panel hosted by Page/Park to support the project governance arrangements set out above. The purpose of this panel was to allow the design team to have access to experts when required. In addition to this, there were approximately 125 highly experienced, specialist conservators and craftspeople working on the project. The GSA also sought support and advice throughout the project from other conservation bodies and those undertaking similar post-fire projects. These included Historic Environment Scotland, the National Trust and Battersea Arts Centre. The GSA stated in this regard that—
  - Such accessibility to a range of experts across all aspects of the project, helped us anticipate and mitigate challenges throughout the project as well as ensuring the highest quality of design and work on site. Our architects also played a key role in setting up the organisation BIM For Heritage, which is instrumental in developing and providing advice for those using this technology in historic buildings projects.

Source: Glasgow School of Art, 2018<sup>49</sup>

- 81. The GSA considered that as a result of the expertise developed-
  - The level of expertise gained by our internal team has been called upon by other institutions following major disasters. We have taken part in international disaster response conferences and recently have provided advice to the National Museum of Brazil following the fire there in September.

Source: Glasgow School of Art, 2018<sup>50</sup>

xx Glasgow School of Art, Written Submission, <a href="https://www.parliament.scot/S5\_European/">https://www.parliament.scot/S5\_European/</a> Meeting%20Papers/20181112 CTEEA PublicMeetingPapers.pdf

82. The Committee notes the GSA's approach to procurement and accepts that the school had oversight of the project. Notwithstanding these oversight arrangements, there was a second fire.

### Site visits to the Mackintosh restoration project

- 83. In the months following the 2018 fire, the Committee became aware of reports that the remnants of the Mackintosh building not destroyed by the 2014 fire were being used for events.
- 84. With regards to the site being used for events during the restoration period, the GSA state in their supplementary written evidence to the Committee state that-
  - After the award of the Main Contract to Kier Construction (Scotland) Ltd in June 2016, GSA continued to seek opportunities to provide safe access for interest groups, our own and other students and professionals to the building whenever the operations on site allowed. These visits were developed with Kier subject to the GSA Access Protocols, the status of operations on site and Kier's Health and Safety assessments. Safety of visitors and operatives and efficient site operations remained the absolute priorities at all times.

Source: Glasgow School of Art, 2018<sup>51</sup>

- 85. In oral evidence to the Committee, Dr Muriel Gray observed, in relation to visits to the site of the Mackintosh building, that—
  - The interest in the Mackintosh building has been enormous, and it was very important to our connection with the local community, the wider artistic community and everybody else who was interested that, when we were only months away from opening an absolute jewel, people had access to it during the rebuilding process—which, in itself, was interesting and part of many research projects.

Source: Culture, Tourism, Europe and External Affairs Committee 15 November 2018, Muriel Gray, contrib. 127<sup>52</sup>

86. Liz Davidson, Senior Project Manager for the restoration project, emphasised that encouraging visits to the site was a core component that was written into the Keir Construction contract. She noted that—

Before Kier was appointed, we wrote into the tender the commitment that we would demystify construction, bring people into the industry, talk about the traditional skills and spread awareness of this extraordinary building. In furtherance of the Scottish Government's procurement approach, we wanted that to be in the process. Under the public contracts Scotland process, we wanted to engage through a community benefit clause with the local community, the wider community and the educated and interested community. We had visitors from America, Japan and across the road. When it was safe to have visits, a strict protocol applied, which included using personal protective equipment and following standards.

Source: Culture, Tourism, Europe and External Affairs Committee 15 November 2018, Liz Davidson, contrib. 138<sup>53</sup>

- 87. Dr Gray also commented on media speculation regarding visitors having access to the site and the safety procedures in place. She noted in oral evidence that-
  - I can tell you that because I visited as a member of the Glasgow School of Art choir, which sang in the library to raise money.

Nobody at all was allowed on site who had not gone through a thorough vetting and induction procedure. The photographs in the press showed people who had been through that process and were in a safe area, where they were permitted to take off their hard hats. We followed the protocols to the rule.

Source: Culture, Tourism, Europe and External Affairs Committee 15 November 2018, Muriel Gray, contrib. 127<sup>52</sup>

- 88. When the Committee asked about the suitability of having visitors on site during the restoration period, conservation architect Dawson Stelfox told the Committee that:
  - The principle is that the contractor is in control of the site. Therefore, there should be no activities and nobody on the site without the contractor's permission, and the contractor should give that permission only if it can provide a safe environment and be satisfied that there is no risk to the works or the building as a result. The onus remains with the contractor in such cases.

It is quite normal to invite people in, especially with heritage buildings. I regularly do hard-hat tours, which are partly about explaining the historic building restoration process to the public and to funders, owners and other people. There is nothing abnormal about bringing people in, but control and management of that are important, and the responsibility is with the contractor that is in possession of the site.

Source: Culture, Tourism, Europe and External Affairs Committee 17 January 2019, Dawson Stelfox, contrib. 83<sup>54</sup>

89. Architect and Director of Professional Studies at the GSA Gordon Gibb disputed a number of these claims in his supplementary written evidence to the Committee In particular, Mr Gibb contends that the client's (GSA) use of the site for visits introduced a degree of ambiguity with regards to possession of the site which caused unnecessary risk to the building. Furthermore, Mr Gibb has contended that none of the visiting groups or events listed bore any relationship to the reconstruction works, and none were necessary. It his belief that this endangered

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the building unnecessarily. He also questioned whether the required PPE was worn during some of the events citing photographic evidence widely publicised in the media.

90. The Committee considers that the GSA appear to have acted in accordance with common practice governing sites of this type but notes the commentary, following the 2018 fire, regarding site visits. The Committee considers that a greater degree of transparency and communication regarding how the site was being used during the restoration period would have lessened commentary of this kind. The issue of transparency and communication is considered later in this report.

## Fire alarm on the night of the 2018 fire

- 91. The Committee is aware of reports that on the night of the 2018 fire, witnesses in the vicinity considered that the fire alarm system in place to protect the site did not appear to have been operational. In oral evidence to the Committee, Eileen Reid stated that—
  - One of the astonishing things was that the fire alarm did not go off that night and this so-called gold-plated security that was agreed or not agreed seemed to comprise of three security guards in total so there was only one on duty at any given time—he was located in a Portakabin and was supposed to spot what happened visually. The community has been saying, "We didn't hear any fire alarms."

Source: Culture, Tourism, Europe and External Affairs Committee 20 September 2018, Eileen Reid, contrib. 87<sup>55</sup>

- 92. The Committee raised this issue with Kier Construction, as the responsible contractor for the site. Brian McQuade, Managing Director at Kier Construction Scotland, considered that the fire alarm system was operational, stating that—
  - Unfortunately, I was not there on the evening, so I cannot comment on whether I would have heard a fire alarm. However, I can say that the systems were all in place and had been tested.

Source: Culture, Tourism, Europe and External Affairs Committee 25 October 2018, Brian McQuade, contrib. 103<sup>56</sup>

93. The Committee heard evidence that fire alarms can be switched off in instances where particular work is being carried out, for example hot works. When asked about the possibility of the fire alarm being switched off on the night of the 2018 fire, Brian McQuade confirmed that while the fire alarms were switched off at different stages to accommodate specific works he could not say whether the alarm had been switched off on that particular day. Mr McQuade noted that he had spoken to staff who had been on site and that the staff present had considered the system to be operational.

xxi Gordon Gibb, Written Submission, p.2.<u>https://www.parliament.scot/S5\_European/Gordon Gibb GSA.pdf</u>

- 94. However, we note that since our evidence gathering concluded there have been a number of media reports of a significant delay between the outbreak of fire and the fire service being notified of the incident.
- 95. The Committee notes the concerns raised regarding the fire alarm system at the Mackintosh site and reports which questioned whether it was operational on the night of the 2018 fire. The Committee is not in a position to determine whether the fire alarm system was switched on and fully operational on the night of the 2018 fire. The Committee understands that this issue will be considered as part of the ongoing SFRS investigation and the Committee awaits its findings.

## Cladding used in the Mackintosh Building

- 96. During the course of the Committee's inquiry, the Committee became aware from written evidence submitted by Page \ Park Architects\_\_\_that PIR insulation (polyisocyanurate insulation) had been used in parts of the Mackintosh building. This form of insulation is similar to that installed at Grenfell Tower in London. PIR insulation was used at the Mackintosh building in selective areas of roof refurbishments or reconstruction, and more conventionally employed as part of build-ups below slating or as part of an asphalt flat roof system. Page \ Parks written submission noted that—
  - There was no insulation of any form added to external walls. In addition, where PIR was used, it was never in an exposed or cavity situation; it was encapsulated top and bottom with lining material in accordance with manufacturers' recommendations.

Source: Page \ Park, 2018<sup>57</sup>

- 97. When asked about the suitability of the PIR insulation used in the Mackintosh building and the potential risks associated with its use, fire safety expert Stephen Mackenzie noted that—
  - The reason why we can use that type of cladding is that it appears to comply with the tests and standards at the time of construction.

Source: Culture, Tourism, Europe and External Affairs Committee 17 January 2019, Stephen Mackenzie, contrib. 44<sup>58</sup>

98. Conservation architect Dawson Stelfox made a similar point about the architects use of these materials at the Mackintosh building. He stated that—

In defence of the architects, if an architect is given a product that seems to comply with legislation, it is understandable why the product would be specified in those circumstances.

Source: Culture, Tourism, Europe and External Affairs Committee 17 January 2019, Dawson Stelfox, contrib. 45<sup>59</sup>

- 99. Mr Stelfox also commented on the wider discussions the industry was currently having about the use of certain materials. He observed that—
  - There is a lot of confusion in the construction industry about the performance of foam materials, particularly in relation to composite layers—for example, when a layer of foam is buried above a concrete roof or when a ceiling is underneath a fire-resistant material. Most architects would not think that that adds to the fire risk of a building. If it is adding to the risk—the evidence suggests that it is—the profession will certainly need to do more to specify what materials can be used. After Grenfell, our understanding of those issues has changed quite a lot. However, there are uncertainties about how the products perform when they are in complex composite layers.

Source: Culture, Tourism, Europe and External Affairs Committee 17 January 2019, Dawson Stelfox, contrib.  $45^{59}$ 

- 100. Stephen Mackenzie, also noted that there was an ongoing debate in the UK about the different types of insulation being used in the construction industry and their associated performance and cost.
- 101. The Committee notes the ongoing debate regarding the use of certain insulation materials. Given the concerns raised regarding the use of PIR insulation the Committee recommends that the Scottish Government, HES and SFRS take cognisance of the on-going debate on this issue and consider whether PIR insulation poses an unacceptable fire risk.

### Governance

102. During the course of the Committee's Inquiry, issues were raised primarily in relation to governance with regard to the GSA Board and also concerning the governance implications arising from the dual purpose of the Mackintosh building.

## **Governance: Glasgow Art School Board**

- 103. As a Higher Education Institution (HEI), the GSA is accountable through a governing body which carries ultimate responsibility for all aspects of the institution. It is for the GSA's Board to ensure the effective management of the School. The Board is responsible for the development, approval and review of the mission and strategic vision of the School, including: approval of the School's long-term strategic plans (academic and business), major investment decisions and risk assessment.
- 104. The GSA stated, in their written submission, that the School is subject to the same audit and performance management regulatory framework as every other HEI in Scotland. Accordingly, the GSA produces an annual Outcome Agreement which is approved by the Scottish Funding Council. In 2016-17, the GSA also initiated an externally led governance review, which concluded that the School's governance was effective. In their written submission to the Committee, the GSA stated—
  - Our collective governance and management skills have helped us to deal with one of the most significant events in the history of the School whilst continuing to deliver for our students, staff and Scotland articulated through our Scottish Funding Council Outcome Agreement.

Source: Glasgow School of Art, 2018<sup>60</sup>

- 105. The Committee makes no observations about the suitability of the performance and regulatory frameworks governing HEI's. However, it was suggested by Mackintosh scholar Roger Billcliffe that the changing composition of the Board may have attributed to a shift in the way in which the organisation viewed the Mackintosh Building and its importance to the GSA's overall estate. He stated that—
  - The board has changed considerably, and it has changed along with the school's attitude to Mackintosh. Up to 20 years ago, the administration was very much aware of the importance of Mackintosh and the building not just to teaching. Most of the directors of the school of art since the war had been taught in the Mackintosh building or had other connections with it, but that stopped around 2000, when an administration was built that was not dependent on people who had been trained in the school and had specific knowledge of the building.

Source: Culture, Tourism, Europe and External Affairs Committee 20 September 2018, Roger Billcliffe, contrib. 37<sup>61</sup>

106. The Committee sought the perspective of HES regarding whether HEI's, such as the GSA, have the necessary expertise to manage Category A Listed buildings of national significance. Barbara Cummins, Director of Heritage at HES, reflected that no work has been carried out on their suitability. She stated that—

there are more than 45,000 listed buildings in Scotland and they are generally the responsibility of their private owners, from individual householders to institutions. The NHS occupies historic buildings as well. It would be a dangerous road to go down to say that an owner cannot look after their building, or cannot access the necessary expertise to do so.

Source: Culture, Tourism, Europe and External Affairs Committee 17 January 2019, Barbara Cummins, contrib.  $140^{62}$ 

- 107. The Committee is not convinced that the GSA gave sufficient priority to the safeguarding of the Mackintosh building. The Committee considers it would have been desirable for there to have been more specific expertise at Board level which reflected the importance of the Mackintosh building within the GSA estate.
- 108. The Committee is concerned that the listing system employed by HES covers a very large number of properties and contains no formal mechanism for recognising that there is a smaller sub-set of Category A Listed properties that are of significant cultural and historic importance to Scotland. The Committee recommends that HES and the Scottish Government consider a more tailored form of categorisation that would provide specific protection to buildings of unique cultural and historic significance.

# The Dual Purpose of the Mackintosh Building

- 109. Before the 2014 fire the Mackintosh building served a dual purpose as both a functioning art school and a museum. From a fire safety perspective, the duality of the building's purpose presented the GSA with a unique set of challenges, namely how to ensure the safe use of the building by GSA students while at the same time allowing public access to the building. Indeed, the GSA stated, in their written evidence, that a key objective of the GSA's 2005 Conservation and Management Plan for the Mackintosh building was to improve public access to the building and its collections and archives in line with huge public interest.
- 110. Since the completion of the Mackintosh building in 1909, the way in which students have used the building has evolved significantly, with students using new and different materials and techniques. As Mackintosh scholar Roger Billcliffe pointed out in his oral evidence to the Committee this shift in the way in which the building is used brings with it additional risks. He commented—

The students today fill the school not with turpentine, oil paints and so on but with very expensive and very hot projectors, dozens of televisions and computer monitors and cables that link them together strewn all over the building. It is a firetrap. Firemen will tell you that most fires happen because of electrical faults, although there are some that happen as a result of someone with a cigarette falling asleep in bed. The school's product is driven by modern technology.

Source: Culture, Tourism, Europe and External Affairs Committee 20 September 2018, Roger Billcliffe, contrib. 57<sup>63</sup>

- 111. In response to these concerns, the Chair of the GSA's Board, Dr Muriel Gray, considered that the student work being carried out in the Mackintosh building was appropriate. She stated, in relation to the 2014 fire, that—
  - The individual who was involved did not follow instructions. Had they done so, that type of work would have been completely appropriate and safe, as it has been for many years. The SFRS report shows that the accident was a perfect storm that involved somebody doing something that they had been instructed several times not to do. The work had nothing to do with it; that kind of work has been going on for years in the art school.

Source: Culture, Tourism, Europe and External Affairs Committee 15 November 2018, Muriel Gray, contrib. 52<sup>64</sup>

- 112. The Committee received written evidence which appears to call into question the managerial decisions taken by the GSA with regards to the student responsible for the 2014 fire. In his written evidence to the Committee Mackintosh Scholar Roger Billcliffe stated that staff had raised concerns but these had been overruled-
  - Since 2014, however, it has been alleged that some staff tried to stop the student's use of these materials but they were over-ruled by senior staff to whom the student appealed claiming a restriction/denial of 'artistic freedom'. This artistic freedom put at risk the lives of over 200 staff and students that day as well as leading to the destruction of the heart of Mackintosh's design, the library. Such actions by the School and its staff would be incompatible not only with simple health and safety concerns but are at the root of the different ethos of museums and art schools.

Source: Roger Billcliffe, 2018<sup>65</sup>

- 113. When the Committee asked fire safety and conservation experts if the shift in the techniques being used within the Mackintosh building were reasonable, they were of the view that it was impossible to stop fires from happening. As such, measures should have been in place to adequately address the risks posed by these techniques being used rather than attributing blame to an individual who had not followed instructions. For example, Dawson Stelfox stated—
  - It is not possible to say that fires will not happen, just because people are told to behave in a particular way. We can give people good advice and follow all the good practice in hot work, site works and everything like that, but we must still assume that there will be fires in buildings.

Source: Culture, Tourism, Europe and External Affairs Committee 17 January 2019, Dawson Stelfox, contrib. 16<sup>66</sup>

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- 114. Evidence received by the Committee from expert witnesses tended to emphasise that, whilst difficult, steps could be taken to ensure that historic buildings were retrofitted to accommodate changes in the ways the building is used. The GSA's written submission to the Committee included information about the lessons learned after the 2014 fire and stated that—
  - The Management Team initiated a number of reviews of operations within the School and continues to do so. These reviews cover academic activities in addition to the estate (which would also cover the Mackintosh Building when returned as part of the operational academic estate).

Source: Glasgow School of Art, 2018<sup>67</sup>

- 115. Glasgow School of Art also emphasised a range of reviews that had been put in place during the Mackintosh restoration project. These were as follows:
  - 1. Critical Incident Management;
  - 2. Fire Procedures including evacuation procedures;
  - 3. Health & Safety Procedures with external Health and Safety officer;
  - 4. Revised academic protocols
  - 5. Staff/Student induction processes;
  - 6. GSA opening hours; and
  - 7. Scoping the comprehensive fire protection system for the restoration works and informing our fire strategy for new buildings<sup>xxiii</sup>
- 116. Despite the reassurances provided by the Glasgow School of Art with regards to the reviews put in place during the Mackintosh restoration project, the Committee is concerned by the lack of transparency regarding what specific measures were taken as a result of the reviews implemented following the 2014 fire. Additionally, the Committee considers that the GSA has been unable to articulate, in the public domain, what lessons were learned from the 2014 fire.
- 117. The Committee considers that the dual purpose of the Mackintosh building places a significant burden upon the building which increases the risk of fire occurring. However, the Committee notes that the Glasgow School of Art remains committed to the dual purpose of the building as both an education building and a museum.

118. The Committee recommends that HES and the Scottish Government review current guidance. This review should take account of whether historic buildings which have a dual function, such as the Mackintosh Building, require additional guidance or support in cognisance of the additional fire risk which their dual-purpose presents.

### The role of Historic Environment Scotland

- 119. Historic Environment Scotland defines its role as the lead public body established to investigate, care for and promote Scotland's historic environment. The funding criteria which HES applies in relation to supporting historic buildings has been considered earlier in this report. However, the Committee also sought to understand more broadly what role HES had fulfilled with regard to the Mackintosh building. In oral evidence HES's Director of Heritage, Barbara Cummins, provided the following overview of the role of HES. She commented that—
  - We act in an advisory capacity; we do not tell people what to do. When it comes to things such as fire measures, experts—you heard from some earlier—will advise on the appropriate mechanism. We give advice for our interests in the historic environment, such as the impact that a mechanism might have on the fabric of a building and whether the intervention is appropriate.

Source: Culture, Tourism, Europe and External Affairs Committee 17 January 2019, Barbara Cummins (Historic Environment Scotland), contrib. 118<sup>13</sup>

- 120. HES stressed, in oral evidence to the Committee, that their involvement was about what was appropriate from a conservation standpoint rather than the speed in which a particular intervention was delivered. HES also emphasised that they had never advised against fire suppression, compartmentation or other measures appropriate for fire safety in historic buildings. The Committee sought the perspective of HES with regard to whether there was a need for a greater sense of urgency when installing a mist suppression system in the Mackintosh building. In this regard, Barbara Cummins stated—
  - There is nothing that we can to do require somebody to implement measures or consents within a particular timeframe. That is not in our remit. In any event, I am not sure how that could be enforced. We have no enforcement or decision-making powers; we can purely provide advice. Part of the discussion that took place both before the first fire and between the two was about fire suppression measures, but it was not about the timescales to deliver them. We are not in a position to require that of any owner.

Source: Culture, Tourism, Europe and External Affairs Committee 17 January 2019, Barbara Cummins, contrib.  $124^{68}$ 

121. Given that HES stressed that their role was purely to provide advice, the Committee queried whether, given that the remit of the organisation includes care for the historic environment, whether there was any need to strengthen the statutory remit of HES. In response, Barbara Cummins stated that—

We have not identified gaps in our statutory duties. However, we always learn lessons from disastrous events. Unfortunately, they happen more frequently than we would like—and not only through fire. As I said, we updated our quidance following the first fire.

Source: Culture, Tourism, Europe and External Affairs Committee 17 January 2019, Barbara Cummins, contrib. 224<sup>69</sup>

- 122. With regard to the lessons that HES had learned from both the 2014 and 2018 fires, Ms Cummins stated—
  - We can respond to the causes of this fire, as we did to the previous one, by updating our guidance based on the lessons learned, but I do not know what powers we could be given to deal with something like this in future. We are involved in and give advice on the construction and building regulations around fire. We advise on the building regulations as they impact on the historic environment to ensure that the historic environment is taken into account.

Source: Culture, Tourism, Europe and External Affairs Committee 17 January 2019, Barbara Cummins, contrib. 128<sup>70</sup>

- 123. The Committee notes HES's statutory position in relation to Category A Listed buildings. However, the Committee considers that whilst there are over 46,000 listed buildings in Scotland, some historic buildings are of far greater considerable cultural and historic importance and measures should be put in place to reflect this. Moreover, the Committee considers that the extent of the involvement of HES with the Mackintosh building, both in terms of funding provided and advice given is a tacit acknowledgment of this position.
- 124. The Committee notes the remit of Historic Environment Scotland is to have a leadership role in relation to the conservation and preservation of historic buildings. Despite this, the Committee considers that Historic Environment Scotland adopted an arms-length approach to the Mackintosh building with regards to safeguarding it from fire. Accordingly, the Committee recommends that the Scotlish Government reviews the remit of Historic Environment Scotland and considers giving it extended statutory powers to intervene in cases where there is a risk to an asset of national significance.

# The Future of the Mackintosh Building

125. The future of the Mackintosh building featured prominently throughout the Committee's deliberations. In particular, four key issues were raised. Firstly, whether responsibility for the Mackintosh building should be transferred to a 'trust'. Secondly, how the GSA can improve transparency and communication. Thirdly, relations between the GSA and the local community. Lastly, whether the Mackintosh building should be re-built and if so, what form that should take.

### **Trust**

- 126. The GSA's written submission to the Committee includes a detailed list of activities in the academic year prior to the second fire. The breadth of these responsibilities highlights the demands placed on the GSA Board and management who have to manage the Schools estate, finances and academic priorities. Reconciling these demands whilst also overseeing the restoration of a Category A Listed building represents a significant additional responsibility for the institution.
- 127. The demands placed on the GSA has led to speculation that the GSA were unable to adequately prioritise the conservation of the Mackintosh building. For example, as architect Malcolm Fraser commented-
  - They were doing what our university culture asks of our institutions—increasing the estate, bringing in more students and building big, flashy new buildings, which they named after themselves. They were not looking after the jewel at the heart of their estate; that was the primary failure of Glasgow School of Art, and many institutions do the same. They fail to care for the jewel at their heart.

Source: Culture, Tourism, Europe and External Affairs Committee 20 September 2018, Malcolm Fraser, contrib. 25<sup>71</sup>

- 128. Similar concerns were raised by Mackintosh scholar Roger Billcliffe, leading him to conclude that the GSA should be relieved of their responsibility of the building. He stated that—
  - This seems to be a suitable time to consider relieving the School of its responsibility for the Mackintosh building (something it is believed to have considered in the 1990s when it offered the building to a government agency) and removing the inherent dangers associated with its occupation by a large body of students. This would remove from the School the apparent burden of running a major 'museum' and also satisfy the growing demand for access, particularly after the injection of £30million of public, private and charitable donations to restore the building following the 2014 fire.

Source: Roger Bilcliffe, 2018<sup>72</sup>

129. The proposal that the GSA should be relieved of their responsibility for the Mackintosh building was a view shared by two former Directors of the Art School. Both Professor Tony Jones and Professor Tom Inns proposed that the Mackintosh Building be handed over to some form of Trust, either during the restoration project or on a longer-term basis. Professor Jones observed, in written evidence, that this suggestion was not new and that he had instigated discussions between the GSA

and Scottish Office to explore a Trust approach during his tenure as Director of the GSA during the 1980s. Professor Inns, who was Director of the GSA until November 2018, suggested that—

It might be very relevant to explore the suggestions of Professor Tony Jones in his submission to the Culture, Tourism, Europe and External Affairs Committee last week. In this he discusses some form of trust that legally and operationally might oversee the Mackintosh Building and its rebuild and restoration. Establishing such a trust would allow the Board of Governors and management team of Glasgow School of Art to focus on the task of running one of the world's top art schools, leaving trustees of an independent trust and its executive team the challenge of what will be one of Scotland's biggest heritage projects over the next 5 – 7 years.

Source: Professor Tom Inns, 2018<sup>73</sup>

- 130. In his written evidence to the Committee Professor Jones stated that-
  - I suggest there needs to be an over-arching guiding team led by an impartial but very senior executive, appointed directly by the First Minister, with the authority to craft a comprehensive plan for the GSA's future. This is a matter of national significance. Such an action would restore confidence. With an appointed group of expert professionals acting as Trustees, under a respected new leader reporting to the First Minister, parliament could assure the public and all those who revere Mackintosh that a bright future was in the right hands, strong hands, safe hands.

Source: Professor Tony Jones, 2018<sup>74</sup>

- 131. In evidence to the Committee, the GSA stated that the Mackintosh building must remain part of the art school's estate on the grounds that they would have the expertise in place to manage the restoration project appropriately. In particular, the GSA emphasised the role that the building itself serves to educate and inspire students. Professor Irene McAra-McWilliam, former Deputy Director of Innovation at the GSA, stated that—
  - It is not a project that can be hived away somewhere else as if it were nothing to do with us and our educational function; it will be embedded in our future and we will learn from it. We will bring the craft teaching into our teaching programmes so that it is integrated.

Source: Culture, Tourism, Europe and External Affairs Committee 15 November 2018, Professor McAra-McWilliam, contrib. 223<sup>75</sup>

132. The Committee heard evidence that questioned the practicality of the GSA handling such a demanding restoration project while at the same time delivering the core educational function of the art school. As Professor Inns explained in his written evidence to the Committee, the restoration of the Mackintosh building following the 2014 fire required the substantial allocation of resources on the part of the GSA. He observed that—

In the four and a half years since the May 2014 fire, a considerable part of my working week, when I was Director, was spent dealing with the Mackintosh Building restoration and associated fund raising. The restoration had its own dedicated project team but also drew widely on resources from across the Art School.

Source: Professor Tom Inns, 2018<sup>76</sup>

- 133. Furthermore, Professor Inns emphasised that additional complexity and financial cost that would be associated with a restoration project following the 2018 fire. He stated that—
  - The budget allocated to the last restoration was £49 million over a 5-year period. If as suggested the rebuild will cost in excess of £100 million over 5-7 years, i.e more than twice the scale of the previous restoration over a longer period of time, this could potentially draw considerable energy, resource and profile away from the Glasgow School of Art and its core purpose of creative teaching and research excellence.

Source: Professor Tom Inns, 2018<sup>73</sup>

- 134. Given the concerns raised about the resources required to manage the project, Professor Inns proposed—
  - The V&A in Dundee was developed in close collaboration between the Universities in Dundee, Dundee City Council, the Scottish Government and other partners. The V&A in Dundee is a museum dedicated to design, the Mackintosh Building should not be a museum but could be a centre of creative education for Glasgow School of Art and the City of Glasgow dedicated to all forms of creative practice and the celebration of Mackintosh's genius

Source: Professor Tom Inns, 2018<sup>77</sup>

- 135. The Committee sought the perspective of the conservation architect Dawson Stelfox regarding the proposed Trust approach. He stated that—
  - It is less a case of the headline institution that is in charge; it is more a case of who is tasked with doing the work and who is deemed to be experienced, competent and knowledgeable enough to do it. Therefore, I do not think that there is necessarily a case for taking responsibility away from the art school. What happens below that level is more important, which concerns the people who are tasked with the proper running of the job.

Source: Culture, Tourism, Europe and External Affairs Committee 17 January 2019, Dawson Stelfox, contrib.  $114^{78}$ 

136. The Committee notes the suggestion made by former directors Professors Inns and Jones that the Mackintosh building be placed in a Trust, with the Glasgow School of Art and Dawson Stelfox taking a different view. The Committee notes that the Trust model is not a new suggestion and has been the subject of discussion over a number of decades as a means of enabling the GSA to focus on its core educational function whilst providing a means of protecting the Mackintosh building. The Committee considers

that the GSA should give serious consideration to placing any future Mackintosh building in a Trust.

## **Transparency and Communication**

- 137. In oral evidence, Mackintosh scholar Roger Billcliffe raised concerns about the GSA's approach to openness and transparency, questioning how the school had communicated the lessons learned following the 2014 fire. Mr Billcliffe commented that—
  - We do not know whether any lessons were learned, because the school has not said a word about the 2014 fire.

Source: Culture, Tourism, Europe and External Affairs Committee 20 September 2018, Roger Billcliffe (Roger Billcliffe Gallery), contrib. 2<sup>79</sup>

- 138. The comments made by Mr Billcliffe appear to reflect wider concerns about the way in which the GSA presents and shares information. In the immediate aftermath of the 2018 fire, the GSA released a press statement which stated that—
  - The Mackintosh Building has been undergoing a period of extensive restoration following the fire in 2014 and therefore has not been a part of the GSA's operational campus for four years.

Source: Glasgow School of Art, 2018<sup>80</sup>

- 139. On 19 June 2018, Roger Billcliffe, in an <u>article</u> on the lessons learned from the 2014 Mackintosh fire, also raised concerns about custody of the building during the renovation following the 2014 fire, stating that—
  - The reason the Mackintosh building was a construction site last week was because of the fire in 2014, a fire for which the school (and its staff, advisers and consultants) would appear to have some responsibility.

Why is the school suddenly so defensive about the current custody of the Mackintosh building? The contractors are not erecting a new-build over which the client wouldn't have much immediate control.

Source: Herald Scotland, 2018<sup>81</sup>

140. Similar concerns were raised, in the media, by a range of commentators following the 2018 fire. For example, a Sunday Herald editorial, in August 2018 commented-

The GSA trustees and director have placed their own brand of omerta, the mafia code of silence, on everyone and anyone who had the slightest involvement or knowledge of the fire which destroyed Glasgow's precious jewel. This was not a privately-owned building with commercial secrets or data to protect. It was paid for by all of us, as are the director and staff. With their refusal to answer they display a breath-taking contempt, not just for the media, but the general public in what was – for the second time – a preventable disaster.

Source: Sunday Herald, 201882

- 141. The Committee also heard evidence that raised concerns with regard to the extent to which the GSA was transparent about the consequences of the 2014 fire in terms of loss of the items within the Mackintosh collection. For example, Stuart Robertson, from the Charles Rennie Mackintosh Society, raised concerns about the level of information available regarding the collections lost following the 2014 fire. He observed that—
  - After the 2014 fire, the loss on the Mackintosh side was very much underplayed. The art school focused predominantly on the degree show and the students. The level of loss in the first fire was not really put into the public domain. Even today, it is very hard to analyse through the website what was lost, which I think was more than 150 pieces of original Mackintosh furniture and his two original oil paintings.

Source: Culture, Tourism, Europe and External Affairs Committee 20 September 2018, Stuart Robertson (Charles Rennie Mackintosh Society), contrib. 7<sup>83</sup>

- 142. In response to these claims, the GSA's written evidence stated that—
  - In March 2015 the Glasgow School of Art issued a full media release detailing the impact of the 2014 fire across the GSA's Archives and Collections. This was covered widely in the media at the time.

Source: Glasgow School of Art, 2018<sup>84</sup>

- 143. Professor McAra-McWilliam reaffirmed this position in oral evidence to the Committee. She stated that-
  - The index was published and, according to the details that I have, it went online in 2014. It was certainly released to the media in 2015, because we had to detail the impact of the fire across our archives and collections. Following that... we provided Museums Galleries Scotland with the detail of the collection's losses so that it could review whether the Mackintosh collection should retain its recognised status. It confirmed that it should. That information has all gone online and the items are detailed on the website. We published it in full and it was reported in the media.

Source: Culture, Tourism, Europe and External Affairs Committee 15 November 2018, Professor McAra-McWilliam, contrib. 114<sup>85</sup>

144. Nevertheless, there was a clear sense from stakeholders that the Committee heard evidence from, that the degree of information and transparency surrounding the consequences of both fires had been far from ideal. Stephen Mackenzie, in his oral

evidence to the Committee, considered that this lack of information has led to unnecessary speculation. He stated that—

In this project, there are a number of statements but no substantiation or evidence underneath them, which has led to some public concern, calls for further investigation and speculation in the media. In a crisis response, or a resilience, emergency planning or disaster recovery response, transparency and effective communication are good. More is less; if you provide all the information, there will be less speculation, and fewer errors or questions about your transparency.

Source: Culture, Tourism, Europe and External Affairs Committee 17 January 2019, Stephen Mackenzie, contrib. 92<sup>86</sup>

- 145. The Committee notes the measures taken by the GSA to provide information to the Committee for the purposes of this inquiry. However, much of the information was not readily available on the GSA's website and had to be provided on request. For example, the GSA's website includes clear information about the restoration project itself but not the governance and decision-making processes underpinning much of this work. Furthermore, the Committee notes that the Charles Rennie Mackintosh Society could not readily find information pertaining to the substantial collections lost following the 2014 fire.
- 146. The Committee therefore recommends the GSA review how it presents information on its website to ensure that information is easily accessible. The Committee considers it is essential that a list of each item and its value from the Mackintosh collection lost in the 2014 and 2018 fires is published in a prominent location and in easily accessible formats.
- 147. Despite the reassurances provided by the GSA, the Committee recommends the GSA review how it disseminates information pertaining to the Mackintosh building to provide a clearer picture of its activities. In particular, the GSA Board should be more transparent regarding the processes which would be put in place regarding any future re-build of the Mackintosh building.

# The Mackintosh building and the Local Community

148. Although the substance of the Committee's inquiry is focused on the GSA's custodianship of the Mackintosh building, the impact the fires have had on the local community cannot not be understated. The 2018 blaze caused substantial disruption to the Garnethill community. As a consequence of the fire, many local residents and businesses were displaced for a substantial period of time. Understandably, this has left many in the local community frustrated leading them to question their relationship with the GSA. The Sauchiehall Street Inner Cordon

Businesses and Garnethill Displaced Residents Group, in a written submission to the Committee, clearly articulated the frustration felt within the local community. The submission stated—

A very long-standing resident writes, "The only interaction with local residents has been GSoA surveyors checking for movement/subsidence due to demolition/building works. We have never been included or invited to any of the degree shows or to see the buildings in the 28 years I've lived in Garnethill, though we've endured the disruption and noise every year". The picture painted is of a selfish neighbour with little understanding of the impact that they have on their community, pursuing their own agenda at every turn.

Source: Sauchiehall Street Inner Cordon Businesses and Garnethill Displaced Residents Group, 201887

- 149. In response to concerns about openness and transparency, that had been raised in evidence to the Committee, the GSA suggested that they had been overwhelmed by requests for information in the immediate aftermath of the 2018 fire. The GSA stated that—
  - Since the 2014 fire, we have endeavoured to respond to the public interest in the situation as well as responding to issues raised by our students, the local community and other stakeholders. After the 2018 fire, the demand for information escalated to such an extent that we set up a website to keep people up to date with developments. There has been no intention to exclude people who want to know what has happened or what happens next. Our Chairwoman has acknowledged that her Board was not entirely successful in communicating with the public in the immediate aftermath of the 2018 fire. She explained that the Board thought they were doing so but it is clear from some public feedback that the information was not getting through to everyone.

Source: Glasgow School of Art, 2018<sup>88</sup>

- 150. In oral evidence to the Committee, the Chair of the GSA Board, Dr Muriel Gray, conceded that the relations with the local community and businesses had been damaged. She stated—
  - I regret not having engaged more fully and sooner with the local community. That was a communications mistake—it was not intentional. The perception that the community had was valid; even if we did not intend it, it was valid if that was how they felt. Poor communication is the one thing that I regret.

Source: Culture, Tourism, Europe and External Affairs Committee 15 November 2018, Muriel Gray, contrib. 275<sup>89</sup>

- 151. Dr Gray also acknowledged the importance of re-building relationships with the local community including local businesses. She stated that
  - we cannot take forward that estate strategy without repairing the damage that some—not all, I might say—of the residents and businesses might feel has been done. If it happens at all—we are still discussing it—the estate strategy will be set out completely in partnership with Glasgow City Council and all the residents, businesses and other involved parties.

Source: Culture, Tourism, Europe and External Affairs Committee 15 November 2018, Muriel Gray, contrib. 233<sup>90</sup>

- 152. The Committee welcomes the GSA's commitment to improving engagement with the local community but considers that more needs to be done to allay the concerns of local residents and rebuild the loss of trust. In particular, the Committee considers that the GSA cannot be truly effective as an institution until relations with the local community have been repaired.
- 153. The Committee recommends that the GSA establish a formal method of engaging with the local community on a permanent basis. At the same time, the GSA should put in place mechanisms to ensure that the local community be fully consulted on any proposals relating to the restoration of the Mackintosh building in the future.

### Rebuilding the Mackintosh building

- 154. Since the 2018 fire, the GSA have been clear about their intention to rebuild the Mackintosh building as a fully functioning art school. As the GSA state in their written submission to the Committee—
  - The fire of June 2018 has further strengthened our resolve to restore the Mackintosh Building both to its rightful place in the School's future and to its central position in the international standing of Glasgow as a creative city. The Mackintosh Building has functioned effectively as a working School of Art from the outset. Its design and structure are a central component of our students" creative education and creative practice.

Source: Glasgow School of Art, 2018<sup>91</sup>

- 155. Whilst it would not be appropriate for the Committee to suggest what course of action should be taken with regards to the future of the Mackintosh building, the Committee received a substantial amount of correspondence expressing views regarding the buildings future. Broadly the views expressed to the Committee offered two views on the future. Firstly, those who consider that the building should be re-built and continue primarily as an educational building. Secondly, those who believe the site of the Mackintosh building should instead fulfil an alternative function. In written evidence to the Committee, architect Malcolm Fraser stated that
  - a key point about the Mack was that its beauty was not just as a historical artefact but as a living, useful building, whose tough beauty continued to nurture generation upon generation of students and should be available to those that follow. And as for "building it elsewhere", the beauty of the building is inexorably woven to its site: how it crowns the steep Garnethill with such graceful massivity. Mackintosh would have put it nowhere else.

Source: Malcolm Fraser, 2018<sup>92</sup>

156. Calls for a rebuild were also supported by Stuart Robertson, director of the Charles Rennie Mackintosh Society, who stated in written evidence that-

Rebuilding the Mackintosh Building must not be relegated to a mere museum, but remain a functioning art school, as Mackintosh created.

What matters is that the next generation of students can push open those swing doors, walk in and study art in the Mack.

Source: Stuart Robertson, 2018<sup>93</sup>

- 157. However, there has also been opposition to a rebuild. For example, Alan Dunlop, an architect and a visiting Professor at Robert Gordon University, wrote in his evidence to the Committee that—
  - I contend that, if you did "rebuild brick by brick" that the replacement would be a lie. It might look like the old building but we all know that it would have to meet a whole long list of contemporary building requirements, quite rightly, that include; access, environmental, structural, safety and security that Mackintosh did not have to address as a part of his creative agenda.

Source: Professor Alan Dunlop, 201894

- 158. Professor Dunlop also pointed to the need for there to be greater transparency surrounding the rebuild process. He stated that—
  - There is little evidence of authentic debate. I see much danger of group think —of exclusion quite literally of anyone with a dissenting opinion and scant regard, if not disrespect for the people around the school -the impact on their immediate, current, long term lives.

Source: Professor Alan Dunlop, 201894

- 159. As considered earlier in this report, the Committee has recommended that the GSA should seek to improve engagement with the local community. The stated aim of the GSA to re-build did elicit concern at the lack of any wider engagement in reaching this decision. When asked if the local community would be consulted on the principle of whether the Mackintosh building should be re-built, Dr Gray stated that—
  - I will not lie to you—we will consult people on how the work is done, but our remit is to rebuild the building.

Source: Culture, Tourism, Europe and External Affairs Committee 15 November 2018, Muriel Gray, contrib. 202<sup>95</sup>

160. The Mackintosh building makes a significant contribution to Glasgow's built heritage, attracting tourists to the city and helping support the wider cultural economy. Stuart Robertson set out his view of the pivotal role the Mackintosh building fulfils in the following terms—

The Glasgow School of Art Mackintosh Building: The loss of a national treasure, 2nd Report, 2019 (Session 5)

The Mackintosh building is one of the big attractions for people coming to the art school and it is viewed round the world as being world class. We sometimes do not appreciate what we have in this country. A number of years ago, it should have received world heritage site status. We did learning journeys to Chicago and Barcelona to see what was being done there, and we asked why the Mackintosh building in our city was not a world heritage site. The city should work for that for the future, because that status is very beneficial. If the building disappeared, that would be a tragedy and would show that Scotland does not care about culture.

Source: Culture, Tourism, Europe and External Affairs Committee 20 September 2018, Stuart Robertson, contrib. 62<sup>96</sup>

161. The Committee believes any discussion regarding the future of the Mackintosh building should fully consider the wider cultural and economic impact of the building. The Committee therefore recommends that the GSA undertake a full consultation exercise with regards to the future of the Mackintosh building, so as to fully acknowledge and understand differing viewpoints, before making a formal decision on whether or not to rebuild.

# Conclusion

- 162. The Committee recognises that the Scottish Fire and Rescue Service investigation is on-going and many of the issues raised in evidence, during the course of the Committee's Inquiry, will not be capable of being addressed until the SFRS has concluded its investigation. In oral evidence, fire safety expert Stephen Mackenzie suggested that a full inquiry be held to examine in more detail the issues surrounding the Mackintosh fire, stating that—
  - I suggest that there is a potential need for a full, detailed forensic investigation of not only the fire ground, but all the project documentation, roles and responsibilities. As in 2014 and 2018, because of the complexity of these hearings, I press upon the committee that there may be a case for a public inquiry to look at the issues and the wider context, and to instigate dialogue between the civil service and the fire sector and conservation sector as to where we go next, considering the backdrop of the on-going Scottish building standards review.

Source: Culture, Tourism, Europe and External Affairs Committee 17 January 2019, Stephen Mackenzie, contrib. 6<sup>97</sup>

- 163. However, on the issue of the need for a public inquiry, the Committee notes the comments made by Cabinet Secretary for Culture, Tourism and External Affairs, that—
  - I can understand people want lots of their questions answered but clearly we've got to have the process in place first, we have to have the fire investigation first and I think we should give people the time to carry out those very responsible duties to best effect and that will give us clarity of what is possible going forward.

Source: Glasgowlive, 2018<sup>98</sup>

- 164. The Committee considers from the evidence gathered that the Mackintosh fires raise a host of associated issues which go beyond the cause of the fire itself and as such require further examination.
- 165. The Committee recommends that after the conclusion of the SFRS report, the Scottish Government should establish a public inquiry with judicial powers into the 2014 and 2018 fires at the Glasgow School of Art. The inquiry should also examine the risks posed by fire in historic buildings nationally and the ability of custodians to manage these properties, drawing on the lessons learned from the GSA.

# **Annexe A: Extract of Meeting Minutes**

#### 23rd Meeting, 2018 (Session 5), Thursday 20 September 2018

1. Glasgow School of Art: The Committee took evidence from—

Eileen Reid, Former Head of Widening Participation at Glasgow School of Art; Malcolm Fraser, Architect; Roger Billcliffe, Director, Roger Billcliffe Gallery and Charles Rennie Mackintosh scholar; Stuart Robertson, Director, Charles Rennie Mackintosh Society.

2. Glasgow School of Art (in private): The Committee considered the evidence heard earlier in the meeting.

#### 26th Meeting, 2018 (Session 5), Thursday 25 October 2018

Glasgow School of Art: The Committee took evidence from—

Brian McQuade, Managing Director, Kier Scotland; David Page, Director, and David Paton, Head of Design Review, Page\Park Architects.

### 29th Meeting, 2018 (Session 5), Thursday 15 November 2018

1. Glasgow School of Art: The Committee took evidence from—

Muriel Gray, Chair of the Board of Governors, Prof. Irene McAra-McWilliam OBE, Deputy Director (Innovation), and Liz Davidson OBE, Senior Project Manager, Mackintosh Building Restoration, Glasgow School of Art.

2. Consideration of evidence heard (in private): The Committee considered the evidence heard earlier in the meeting.

#### 2nd Meeting, 2019 (Session 5) Thursday 17 January 2019

1. Glasgow School of Art: The Committee took evidence from—

Dawson Stelfox, Conservation Architect and Consultant, Consarc Design Group Ltd; Stephen Mackenzie, Independent fire, security & resilience advisor; Barbara Cummins, Director of Heritage, Dara Parsons, Deputy Head of Casework, and Thomas Knowles, Head of Grants, Historic Environment Scotland.

3. Consideration of evidence heard (in private): The Committee considered the evidence heard earlier in the meeting.

# **Annexe B: Written Evidence**

All written evidence relating to the Committee's work on the Glasgow School of Arts' Mackintosh Building can be viewed here:

https://www.parliament.scot/parliamentarybusiness/CurrentCommittees/109732.aspx

# **Annexe C: Oral Evidence**

The Committee took oral evidence as follows:

Thursday 20 September 2018-

Eileen Reid, Former Head of Widening Participation at Glasgow School of Art; Malcolm Fraser, Architect; Roger Billcliffe, Director, Roger Billcliffe Gallery and Charles Rennie Mackintosh scholar; Stuart Robertson, Director, Charles Rennie Mackintosh Society.

### Official Report of the meeting.

Thursday 25 October 2018-

Brian McQuade, Managing Director, Kier Scotland; David Page, Director, and David Paton, Head of Design Review, Page\Park Architects.

### Official Report of the meeting

Thursday 15 November 2018-

Muriel Gray, Chair of the Board of Governors, Prof. Irene McAra-McWilliam OBE, Deputy Director (Innovation), and Liz Davidson OBE, Senior Project Manager, Mackintosh Building Restoration, Glasgow School of Art.

### Official Report of the Meeting

Thursday 17 January 2019

Dawson Stelfox, Conservation Architect and Consultant, Consarc Design Group Ltd; Stephen Mackenzie, Independent fire, security & resilience advisor; Barbara Cummins, Director of Heritage, Dara Parsons, Deputy Head of Casework, and Thomas Knowles, Head of Grants, Historic Environment Scotland.

### Official Report of the Meeting

- [1] Page\Park. (2018, October 25). Written Submission, p.1. Retrieved from https://www.parliament.scot/S5\_European/General%20Documents/CTEEA\_2018.10.25\_Evidence.pdf
- [2] Kidd, S. (2018). Written Submission, p2. Retrieved from https://www.parliament.scot/ S5 European/General%20Documents/CTEEA GSoA WritEv Stewart Kidd.pdf
- [3] Culture, Tourism, Europe and External Affairs Committee 20 September 2018, Eileen Reid, contrib. 24, http://www.scottish.parliament.uk/parliamentarybusiness/report.aspx?r=11683&c=2113542
- [4] GSA. (2018). Written Submission, p.8. Retrieved from https://www.parliament.scot/ S5\_European/Meeting%20Papers/20181112\_CTEEA\_PublicMeetingPapers.pdf
- [5] GSA. (2018). Written Submission, Fire Protection Strategy Options Summary, p.3.. Retrieved from https://www.parliament.scot/S5\_European/Meeting%20Papers/20181112 CTEEA PublicMeetingPapers.pdf
- [6] GSA. (2018). Written Submission, Fire Protection Strategy Options Summary, p.5. Retrieved from https://www.parliament.scot/S5\_European/Meeting%20Papers/ 20181112 CTEEA PublicMeetingPapers.pdf
- [7] Parge\Park. (2018). Written Submission, p.2. Retrieved from https://www.parliament.scot/ S5 European/General%20Documents/CTEEA 2018.10.25 Evidence.pdf
- [8] GSA. (2018). Written Submission, Buro Happold, Property Protection Feasibility Study, p.30. Retrieved from https://www.parliament.scot/S5\_European/Meeting%20Papers/ 20181112\_CTEEA\_PublicMeetingPapers.pdf
- [9] Glasgow School of Art. (2018). Written Submission, Glasgow School of Art, Property Protection Feasibility Study, p.39. Retrieved from https://www.parliament.scot/S5\_European/Meeting%20Papers/20181112\_CTEEA\_PublicMeetingPapers.pdf
- [10] Culture, Tourism, Europe and External Affairs Committee 20 September 2018, Eileen Reid, contrib. 6, http://www.scottish.parliament.uk/parliamentarybusiness/report.aspx?r=11683&c=2113524
- [11] Glasgow School of Art. (2018). Written Submission, p.13. Retrieved from https://www.parliament.scot/S5\_European/Meeting%20Papers/ 20181112 CTEEA PublicMeetingPapers.pdf
- [12] Culture, Tourism, Europe and External Affairs Committee 15 November 2018, Muriel Gray, contrib. 23, http://www.scottish.parliament.uk/parliamentarybusiness/report.aspx?r=11789&c=2129214
- [13] Culture, Tourism, Europe and External Affairs Committee 17 January 2019, Barbara Cummins (Historic Environment Scotland), contrib. 118, http://www.scottish.parliament.uk/parliamentarybusiness/report.aspx?r=11900&c=2146647
- [14] Culture, Tourism, Europe and External Affairs Committee 15 November 2018, The Convener, contrib. 34, http://www.scottish.parliament.uk/parliamentarybusiness/report.aspx?r=11789&c=2129225

- [15] Glasgow School of Art. (2018). Written Submission, Buro Happold, Property Protection Feasibility Study, p10. Retrieved from https://www.parliament.scot/S5\_European/Meeting%20Papers/20181112 CTEEA PublicMeetingPapers.pdf
- [16] Culture, Tourism, Europe and External Affairs Committee 17 January 2019, Stephen Mackenzie, contrib. 11, http://www.scottish.parliament.uk/parliamentarybusiness/report.aspx?r=11900&c=2146540
- [17] Culture, Tourism, Europe and External Affairs Committee 17 January 2019, Dawson Stelfox, contrib. 12, http://www.scottish.parliament.uk/parliamentarybusiness/report.aspx?r=11900&c=2146541
- [18] Glasgow School of Art. (2018). Written Submission, p.8. Retrieved from https://www.parliament.scot/S5\_European/Meeting%20Papers/ 20181112 CTEEA PublicMeetingPapers.pdf
- [19] Culture, Tourism, Europe and External Affairs Committee 15 November 2018, Liz Davidson, contrib. 266, http://www.scottish.parliament.uk/parliamentarybusiness/report.aspx?r=11789&c=2129457
- [20] Culture, Tourism, Europe and External Affairs Committee 15 November 2018, Muriel Gray, contrib. 68, http://www.scottish.parliament.uk/parliamentarybusiness/report.aspx?r=11789&c=2129259
- [21] Roger Bilcliffe, Stuart Robertson. (2018). written Submission, p.1. Retrieved from https://www.parliament.scot/S5\_European/General%20Documents/ CTEEA WritSub GSOA Stuart Robertson and Roger Billcliffe.pdf
- [22] Culture, Tourism, Europe and External Affairs Committee 15 November 2018, Muriel Gray, contrib. 271, http://www.scottish.parliament.uk/parliamentarybusiness/report.aspx?r=11789&c=2129462
- [23] Culture, Tourism, Europe and External Affairs Committee 17 January 2019, Dawson Stelfox, contrib. 63, http://www.scottish.parliament.uk/parliamentarybusiness/ report.aspx?r=11900&c=2146592
- [24] Culture, Tourism, Europe and External Affairs Committee 17 January 2019, Thomas Knowles, contrib. 202, http://www.scottish.parliament.uk/parliamentarybusiness/report.aspx?r=11900&c=2146731
- [25] Culture, Tourism, Europe and External Affairs Committee 17 January 2019, Thomas Knowles, contrib. 214, http://www.scottish.parliament.uk/parliamentarybusiness/ report.aspx?r=11900&c=2146743
- [26] Glasgow School of Art. (2018). Written Submission, p.4. Retrieved from https://www.parliament.scot/S5\_European/Inquiries/ CTEEA 20190128 GSASuppSub 17JanCtte.pdf
- [27] Scottish Fire and Rescue Service. (n.d.) Fire Investigation Report,p.8. Retrieved from https://www.firescotland.gov.uk/media/708503/redacted\_version\_fi\_wh\_gc\_006\_14\_\_\_21735141\_\_\_mackintosh\_building\_167\_renfrew\_st reet\_glasgow\_\_redacted\_.pdf

- [28] Glasgow School of Art. (2018). Written Submission, p.10. Retrieved from https://www.parliament.scot/S5\_European/Meeting%20Papers/ 20181112\_CTEEA\_PublicMeetingPapers.pdf
- [29] Glasgow School of Art. (2018). Written Submission, p.3. Retrieved from https://www.parliament.scot/S5\_European/Inquiries/ CTEEA\_20190128\_GSASuppSub\_17JanCtte.pdf
- [30] Culture, Tourism, Europe and External Affairs Committee 25 October 2018, David Paton, contrib. 190, http://www.scottish.parliament.uk/parliamentarybusiness/report.aspx?r=11739&c=2121713
- [31] Culture, Tourism, Europe and External Affairs Committee 25 October 2018, David Page, contrib. 192, http://www.scottish.parliament.uk/parliamentarybusiness/report.aspx?r=11739&c=2121715
- [32] Culture, Tourism, Europe and External Affairs Committee 17 January 2019, Dawson Stelfox, contrib. 4, http://www.scottish.parliament.uk/parliamentarybusiness/report.aspx?r=11900&c=2146533
- [33] Culture, Tourism, Europe and External Affairs Committee 17 January 2019, Dawson Stelfox (Consarc Design Group Ltd), contrib. 2, http://www.scottish.parliament.uk/parliamentarybusiness/report.aspx?r=11900&c=2146531
- [34] Culture, Tourism, Europe and External Affairs Committee 15 November 2018, Muriel Gray (Glasgow School of Art), contrib. 4, http://www.scottish.parliament.uk/parliamentarybusiness/report.aspx?r=11789&c=2129195
- [35] Culture, Tourism, Europe and External Affairs Committee 25 October 2018, David Paton, contrib. 19, http://www.scottish.parliament.uk/parliamentarybusiness/report.aspx?r=11739&c=2121542
- [36] Culture, Tourism, Europe and External Affairs Committee 17 January 2019, Dawson Stelfox, contrib. 93, http://www.scottish.parliament.uk/parliamentarybusiness/report.aspx?r=11900&c=2146622
- [37] Stewart Kidd. (2018). Written evidence, p.3. Retrieved from https://www.parliament.scot/ S5\_European/General%20Documents/CTEEA\_GSoA\_WritEv\_Stewart\_Kidd.pdf
- [38] Culture, Tourism, Europe and External Affairs Committee 17 January 2019, Dawson Stelfox, contrib. 14, http://www.scottish.parliament.uk/parliamentarybusiness/report.aspx?r=11900&c=2146543
- [39] Culture, Tourism, Europe and External Affairs Committee 17 January 2019, Stephen Mackenzie, contrib. 21, http://www.scottish.parliament.uk/parliamentarybusiness/report.aspx?r=11900&c=2146550
- [40] Culture, Tourism, Europe and External Affairs Committee 17 January 2019, Barbara Cummins, contrib. 136, http://www.scottish.parliament.uk/parliamentarybusiness/report.aspx?r=11900&c=2146665
- [41] Glasgow School of Art. (2018). Written Submission, p11.. Retrieved from https://www.parliament.scot/S5\_European/Meeting%20Papers/ 20181112 CTEEA PublicMeetingPapers.pdf.

- [42] Glasgow School of Art. (2018). Written Submission, p.2. Retrieved from https://www.parliament.scot/S5\_European/Inquiries/ CTEEA 20190128 GSASuppSub 17JanCtte.pdf
- [43] Health and Safety Executive. (2015). Construction (Design and Management) Regulations 2015 (CDM 2015). Retrieved from The client, designers or principal designer should ensure, so far as reasonably practical, that the project is designed and planned in conjunction with the contractor and their programming of the works to achieve the early installation and operation of... automatic sprinkler and other fixed firefighting installations where planned..."
- [44] Glasgow School of Art. (2018). Written Submission, p2.. Retrieved from https://www.parliament.scot/S5\_European/Inquiries/ CTEEA 20190116 GSASuppSub GGibb.pdf
- [45] Gordon Gibb. (2019). Written Submission, p.1. Retrieved from https://www.parliament.scot/ S5\_European/Inquiries/Supplementary\_GordonGibb\_20190116.pdf
- [46] Gordon Gibb. (2019). Written Submission, p,1. Retrieved from https://www.parliament.scot/ S5\_European/ G\_Gibb\_Response\_to\_GSA\_commentary\_30\_Jan\_2019\_to\_Culture\_Comm\_07-02-2019\_( 004).pdf
- [47] Gordon Gibb. (2019). Written Submission, p.2. Retrieved from https://www.parliament.scot/ S5\_European/ G\_Gibb\_Response\_to\_GSA\_commentary\_30\_Jan\_2019\_to\_Culture\_Comm\_07-02-2019\_( 004).pdf
- [48] Glasgow School of Art. (2018). Written Submission, p,14. Retrieved from https://www.parliament.scot/S5\_European/Meeting%20Papers/ 20181112\_CTEEA\_PublicMeetingPapers.pdf
- [49] Glasgow School of Art. (2018). Written Submission, p3.. Retrieved from https://www.parliament.scot/S5\_European/Meeting%20Papers/ 20181112 CTEEA PublicMeetingPapers.pdf
- [50] Glasgow School of Art. (2018). Written Submission, p.3. Retrieved from https://www.parliament.scot/S5\_European/Meeting%20Papers/ 20181112 CTEEA PublicMeetingPapers.pdf
- [51] Glasgow School of Art. (2018). Written Submission, Statement of Rebuttal, p.4. Retrieved from https://www.parliament.scot/S5\_European/General%20Documents/ CTEEA 2018.11.15 GSAEvidence.pdf
- [52] Culture, Tourism, Europe and External Affairs Committee 15 November 2018, Muriel Gray, contrib. 127, http://www.scottish.parliament.uk/parliamentarybusiness/report.aspx?r=11789&c=2129318
- [53] Culture, Tourism, Europe and External Affairs Committee 15 November 2018, Liz Davidson, contrib. 138, http://www.scottish.parliament.uk/parliamentarybusiness/report.aspx?r=11789&c=2129329

- [54] Culture, Tourism, Europe and External Affairs Committee 17 January 2019, Dawson Stelfox, contrib. 83, http://www.scottish.parliament.uk/parliamentarybusiness/report.aspx?r=11900&c=2146612
- [55] Culture, Tourism, Europe and External Affairs Committee 20 September 2018, Eileen Reid, contrib. 87, http://www.scottish.parliament.uk/parliamentarybusiness/report.aspx?r=11683&c=2113605
- [56] Culture, Tourism, Europe and External Affairs Committee 25 October 2018, Brian McQuade, contrib. 103, http://www.scottish.parliament.uk/parliamentarybusiness/ report.aspx?r=11739&c=2121626
- [57] Page \ Park. (2018). Written Submission, p1. Retrieved from https://www.parliament.scot/ S5 European/General%20Documents/3.2.2 PPInsulationQuestions.pdf
- [58] Culture, Tourism, Europe and External Affairs Committee 17 January 2019, Stephen Mackenzie, contrib. 44, http://www.scottish.parliament.uk/parliamentarybusiness/ report.aspx?r=11900&c=2146573
- [59] Culture, Tourism, Europe and External Affairs Committee 17 January 2019, Dawson Stelfox, contrib. 45, http://www.scottish.parliament.uk/parliamentarybusiness/report.aspx?r=11900&c=2146574
- [60] Glasgow School of Art. (2018). Written Submission, p.6. Retrieved from https://www.parliament.scot/S5\_European/Meeting%20Papers/ 20181112 CTEEA PublicMeetingPapers.pdf
- [61] Culture, Tourism, Europe and External Affairs Committee 20 September 2018, Roger Billcliffe, contrib. 37, http://www.scottish.parliament.uk/parliamentarybusiness/ report.aspx?r=11683&c=2113555
- [62] Culture, Tourism, Europe and External Affairs Committee 17 January 2019, Barbara Cummins, contrib. 140, http://www.scottish.parliament.uk/parliamentarybusiness/report.aspx?r=11900&c=2146669
- [63] Culture, Tourism, Europe and External Affairs Committee 20 September 2018, Roger Billcliffe, contrib. 57, http://www.scottish.parliament.uk/parliamentarybusiness/ report.aspx?r=11683&c=2113575
- [64] Culture, Tourism, Europe and External Affairs Committee 15 November 2018, Muriel Gray, contrib. 52, http://www.scottish.parliament.uk/parliamentarybusiness/report.aspx?r=11789&c=2129243
- [65] Roger Billcliffe. (2018). Written Submission, p.3. Retrieved from https://www.parliament.scot/S5\_European/General%20Documents/ CTEEA\_GSoA\_WritEv\_Roger\_Billcliffe.pdf
- [66] Culture, Tourism, Europe and External Affairs Committee 17 January 2019, Dawson Stelfox, contrib. 16, http://www.scottish.parliament.uk/parliamentarybusiness/ report.aspx?r=11900&c=2146545
- [67] Glasgow School of Art. (2018). Written Submission, p.17. Retrieved from https://www.parliament.scot/S5\_European/General%20Documents/ CTEEA 2018.11.15 GSAEvidence.pdf

- [68] Culture, Tourism, Europe and External Affairs Committee 17 January 2019, Barbara Cummins, contrib. 124, http://www.scottish.parliament.uk/parliamentarybusiness/report.aspx?r=11900&c=2146653
- [69] Culture, Tourism, Europe and External Affairs Committee 17 January 2019, Barbara Cummins, contrib. 224, http://www.scottish.parliament.uk/parliamentarybusiness/report.aspx?r=11900&c=2146753
- [70] Culture, Tourism, Europe and External Affairs Committee 17 January 2019, Barbara Cummins, contrib. 128, http://www.scottish.parliament.uk/parliamentarybusiness/report.aspx?r=11900&c=2146657
- [71] Culture, Tourism, Europe and External Affairs Committee 20 September 2018, Malcolm Fraser, contrib. 25, http://www.scottish.parliament.uk/parliamentarybusiness/report.aspx?r=11683&c=2113543
- [72] Roger Bilcliffe. (2018). Written Submission, p.3. Retrieved from https://www.parliament.scot/S5\_European/General%20Documents/ CTEEA GSoA WritEv Roger Billcliffe.pdf
- [73] Professor Tom Inns. (2018). Written Submission, p2. Retrieved from https://www.parliament.scot/S5\_European/General%20Documents/ 20181311ProfTomInnsStatement.pdf
- [74] Professor Tony Jones. (2018). Written Submission, p4. Retrieved from https://www.parliament.scot/S5\_European/General%20Documents/ CTEEA WritSub GSOA Professor Tony Jones.pdf
- [75] Culture, Tourism, Europe and External Affairs Committee 15 November 2018, Professor McAra-McWilliam, contrib. 223, http://www.scottish.parliament.uk/parliamentarybusiness/ report.aspx?r=11789&c=2129414
- [76] Professor Tom Inns. (2018). written Submission, p.2. Retrieved from https://www.parliament.scot/S5\_European/General%20Documents/ 20181311ProfTomInnsStatement.pdf
- [77] Professor Tom Inns. (2018). Written Submission, p.3. Retrieved from https://www.parliament.scot/S5\_European/General%20Documents/ 20181311ProfTomInnsStatement.pdf
- [78] Culture, Tourism, Europe and External Affairs Committee 17 January 2019, Dawson Stelfox, contrib. 114, http://www.scottish.parliament.uk/parliamentarybusiness/ report.aspx?r=11900&c=2146643
- [79] Culture, Tourism, Europe and External Affairs Committee 20 September 2018, Roger Billcliffe (Roger Billcliffe Gallery), contrib. 2, http://www.scottish.parliament.uk/parliamentarybusiness/report.aspx?r=11683&c=2113520
- [80] Glasgow School of Art. (2018, June 15). Press Release. Retrieved from http://www.gsa.ac.uk/about-gsa/key-information/mackintosh-building-fire-15-june-2018/
- [81] Herald Scotland. (2018, June 19). Roger Billcliffe: Were lessons learned from 2014 Mackintosh fire?. Retrieved from https://www.heraldscotland.com/news/16299102.roger-billcliffe-were-lessons-learned-from-2014-mackintosh-fire/

- [82] Sunday Herald. (2018, August 12). Sunday Herald View: The wall of silence over the art gallery school fire must be destroyed. Retrieved from https://www.heraldscotland.com/ opinion/16413511.sunday-herald-view-the-wall-of-silence-over-the-art-gallery-school-firemust-be-destroyed/
- [83] Culture, Tourism, Europe and External Affairs Committee 20 September 2018, Stuart Robertson (Charles Rennie Mackintosh Society), contrib. 7, http://www.scottish.parliament.uk/parliamentarybusiness/report.aspx?r=11683&c=2113525
- [84] Glasgow School of Art. (2018). Written Submission. Retrieved from https://www.parliament.scot/S5\_European/Meeting%20Papers/ 20181112\_CTEEA\_PublicMeetingPapers.pdf
- [85] Culture, Tourism, Europe and External Affairs Committee 15 November 2018, Professor McAra-McWilliam, contrib. 114, http://www.scottish.parliament.uk/parliamentarybusiness/ report.aspx?r=11789&c=2129305
- [86] Culture, Tourism, Europe and External Affairs Committee 17 January 2019, Stephen Mackenzie, contrib. 92, http://www.scottish.parliament.uk/parliamentarybusiness/ report.aspx?r=11900&c=2146621
- [87] Sauchiehall Street Inner Cordon Businesses and Garnethill Displaced Residents Group. (2018). Written Submission,1/2. Retrieved from https://www.parliament.scot/S5\_European/General%20Documents/CTEEA WriteEv GSOA Sauchiehall.pdf
- [88] Glasgow School of Art. (2018). Written Submission, p.17. Retrieved from https://www.parliament.scot/S5\_European/Meeting%20Papers/ 20181112 CTEEA PublicMeetingPapers.pdf
- [89] Culture, Tourism, Europe and External Affairs Committee 15 November 2018, Muriel Gray, contrib. 275, http://www.scottish.parliament.uk/parliamentarybusiness/report.aspx?r=11789&c=2129466
- [90] Culture, Tourism, Europe and External Affairs Committee 15 November 2018, Muriel Gray, contrib. 233, http://www.scottish.parliament.uk/parliamentarybusiness/report.aspx?r=11789&c=2129424
- [91] Glasgow School of Art. (2018). Written Submission, p5. Retrieved from https://www.parliament.scot/S5\_European/Meeting%20Papers/ 20181112\_CTEEA\_PublicMeetingPapers.pdf
- [92] Malcolm Fraser. (2018). Written Submission, p.1. Retrieved from https://www.parliament.scot/S5\_European/General%20Documents/ CTEEA\_GSoA\_WritEv\_Malcolm\_Fraser.pdf
- [93] Stuart Robertson. (2018). Written Submission,p2. Retrieved from https://www.parliament.scot/S5\_European/Stuart\_Robertson.pdf.pdf
- [94] Professor Alan Dunlop. (2018). Written Submission, p.2. Retrieved from https://www.parliament.scot/S5\_European/Professor\_Alan\_Dunlop.pdf
- [95] Culture, Tourism, Europe and External Affairs Committee 15 November 2018, Muriel Gray, contrib. 202, http://www.scottish.parliament.uk/parliamentarybusiness/report.aspx?r=11789&c=2129393

- [96] Culture, Tourism, Europe and External Affairs Committee 20 September 2018, Stuart Robertson, contrib. 62, http://www.scottish.parliament.uk/parliamentarybusiness/report.aspx?r=11683&c=2113580
- [97] Culture, Tourism, Europe and External Affairs Committee 17 January 2019, Stephen Mackenzie, contrib. 6, http://www.scottish.parliament.uk/parliamentarybusiness/ report.aspx?r=11900&c=2146535
- [98] Glasgowlive. (2018, June 17). I can understand people want lots of their questions answered but clearly we've got to have the process in place first, we have to have the fire investigation first and I think we should give people the time to carry out those very responsible duties to best effect and that will give us clarity of what is possible going forward.. Retrieved from https://www.glasgowlive.co.uk/news/glasgow-news/calls-publicinquiry-glasgow-school-14795071

