

Optimal Economics

Research Project to Improve and Raise Awareness of Certification in Scotland

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Executive Summary

- The Building (Scotland) Act (2003) introduced the option of certification for work requiring a building warrant. Certification is based on the principle that suitably qualified and experienced building professionals and tradesmen can be responsible for ensuring that specified works comply with the building regulations without the need for detailed scrutiny or inspections by local authority verifiers.
- 2. Of the five certification schemes currently in operation, the Certification of Design (building structures) Scheme is considered a substantial and clear success, with the majority of building warrant applications accompanied by a certificate. The certification of construction (electrical) scheme has been less successful but the decline in members and certificates in recent years is cause for concern. This may be attributed to the economic downturn. The other schemes have yet to demonstrate success.
- The building structures scheme has been successful for a number of reasons which include the fact that it demonstrates clear advantages to both applicants in terms of speeding applications and to verifiers in eliminating costs of structural calculations.
- 4. If the other four schemes are to reach the level of success of the building structures scheme they too will need to demonstrate clear advantages to applicants and verifiers.
- 5. Certification needs to be considered the "norm" for applications. Success will require more vigorous promotion by central and local government, emphasising that certificates are expected for all certifiable work and there are benefits in providing the certificates. If failure to supply certificates incurred a time and/or financial penalty the incentive to use certification would greatly increase. This would require changes to the fee structure of building warrant applications and careful consideration would require to be given to the appropriate "additional" charge for non-certified work.
- 6. Certification could also be encouraged by its extension to Schedule 3 Work. For the two certification of construction schemes there is a substantial amount of work which is not subject to a building warrant and hence a certificate is not required. The certification schemes could be extended to cover Schedule 3 work, which would raise quality and standards on these works and increase the demand for certification.
- 7. Other measures could include further promotion of the certifier database as the place to find all approved certifiers under a simple brand so ensuring that searching for a certifier was a simple, straightforward task.
- 8. Certification could also be promoted though public sector procurement by making certifier status and use of certification a requirement of tenders.

1.1 Introduction

1.1.1 Optimal Economics was appointed by Building Standards Division (BSD) of the Scottish Government to undertake a research project to improve and raise awareness of certification in Scotland. The Building Scotland Act (2003) introduced the option of certification for work requiring a building warrant. Certification is based on the principle that suitably qualified and experienced building professionals and tradespeople can be responsible for ensuring that specified works comply with the building regulations without the need for detailed scrutiny or inspections by local authority verifiers.

1.2 Certification in Scotland

1.2.1 The certification system is administered by BSD and delivered through five approved schemes which are detailed below.

- Certification of Design (building structures) is provided by Structural Engineers Registration Ltd where a chartered structural or civil engineer will certify the structural design of new buildings or alterations and extensions to existing buildings.
- Certification of Design (Section 6 energy) for Non-Domestic Buildings is provided by BRE Global Ltd where a qualified design professional will certify the energy design of non-domestic buildings to ensure that they will be energy efficient with low carbon emissions.
- Certification of Design (Section 6 energy) for Domestic Buildings is provided by BRE Global Ltd and RIAS Services Ltd where a qualified design professional will certify the energy design of domestic buildings to ensure that they will be energy efficient with low carbon emissions.
- Certification of Construction (electrical Installations to BS 7671) provided by Scotland's trade association for the electrical industry (SELECT) and the National Inspection Council for Electrical Installations Contracting (NICEIC). A trained and qualified electrician will do the electrical installation work ensuring it is safe and meets both the building regulations and British Standard BS7671.
- Certification of Construction (drainage, heating and plumbing) provided by the Scottish and Northern Ireland Plumbing Employers Federation (SNIPEF). A trained and qualified plumber will carry out work on drainage, installation of heating systems and installation of certain micro-generation systems ensuring the work complies with building regulations and the applicable Standards.

1.2.2 The submission of a Certificate of Design (building structures) with a building warrant entitles the applicant to a 10% reduction in the building warrant fee and should ensure faster processing of the warrant.

1.2.3 Notification at the building warrant application stage of the intention to submit a number of certificates of construction at completion certificate stage entitles the

applicant to a 1% reduction in the building warrant fee for each certificate up to a maximum of 20%.

1.3 Aims and Objectives

1.3.1 The aim of the research was to gather intelligence on ways of improving the certification system in Scotland with particular consideration of:

- How to increase membership of certification schemes;
- How to increase the number of certificates issued, where relevant;
- How to raise awareness and promote certification in Scotland;
- How the certification system can be improved; and
- Ideas and recommendations on a proposed Ministerial event.

1.3.2 The research has involved a combination of desk analysis of data supplied to BSD by the scheme providers and face-to-face consultations with all scheme providers. There is a large disparity between the number of certificates issued by Approved Certifiers (from scheme providers' data) and those registered by the local authority. This may be due to amended certificates not being recorded by local authorities or certificates not getting to LAs. All certificates of design or construction should be recorded on each local authorities building standard register and form part of the buildings property history. The data provided in this report is from certification scheme providers.

1.4 Report Structure

- 1.4.1 The remainder of the report is organised as follows:
 - Section 2 provides an overview of the performance of the five schemes using data supplied by BSD;
 - Section 3 presents an analysis of the key issues, drawing on the intelligence gathered from the consultations; and
 - Section 4 sets out the study conclusions.

2 Overview of Scheme Performance

2.1 Introduction

2.1.1 The certification scheme providers submit regular data to BSD on the number of certifiers, approved bodies and certificates issued. These data and local authority returns to BSD, including the number of building warrant applications and completion certificate submissions, have been analysed to provide an overview of the performance of the different schemes. The analysis also includes intelligence obtained from the scheme providers during the consultations.

2.2 Certification of Design (Building Structures)

2.2.1 This scheme was approved in 2004 and data for 2006 show there were 423 certifiers and 246 approved bodies in that year. Membership of the scheme is for 5 years and renewal of registration is required after this period. The number of certifiers rose steadily until 2010 (485 certifiers), but there has been a gradual reduction since then with 418 certifiers in 2013. The number of approved bodies rose until 2012 (290 approved bodies) with the number dropping in 2013 to 273 approved bodies. Details are shown in Figure 1.

2.2.2 Membership of the scheme covers a wide range of business types from sole traders to large engineering firms. At the start of the scheme, a target of 400 certifiers was set and this has been maintained since 2006.

2.2.3 It is believed that the reduction in certifiers from 2010 was a result of the recession and retirement from the industry. Conversely the number of approved bodies continued to rise throughout the recession until 2012. This is thought to be the result of certifiers who faced redundancy from larger companies setting up as sole traders.

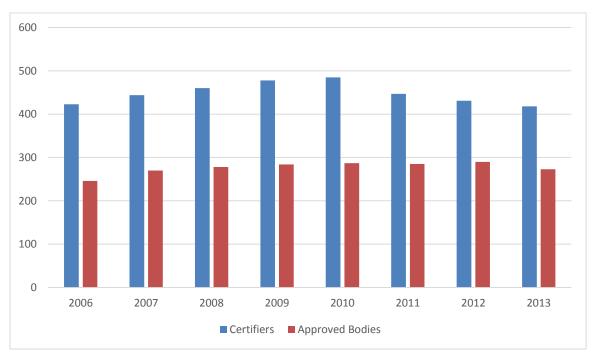


Figure 1 Certifiers and Approved Bodies – Building Structures

2.2.4 Figure 2 shows the number of certificates issued by year. From an initial 11,146 certificates issued in 2006, the number of certificates increased sharply to over 20,800 in 2007. In the wake of the recession the number of certificates issued fell from that peak and has fluctuated around 19,000 since then. An average of 45 certificates were issued per certifier in 2013 and in any quarter, approximately 70% of certifiers and 80% of approved bodies will issue certificates.

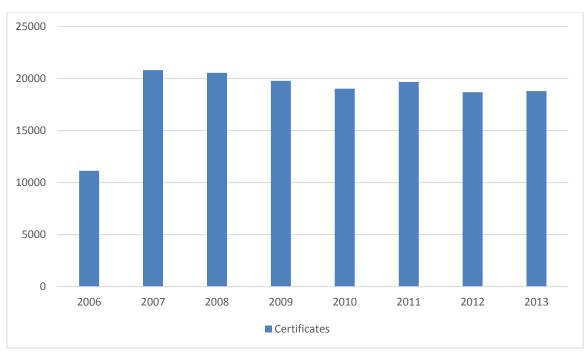


Figure 2 Certificates – Building Structures

2.2.5 Figure 3 shows the distribution of 2012/13 certificates by local authority. In terms of the volume of certificates issued, Edinburgh, Aberdeenshire and Glasgow were the only authorities that had more than 1,000 certificates in 2012/13. While Edinburgh and Glasgow are the two largest authorities in Scotland, Aberdeenshire has a relatively high number of certificates for its size of population. As the scheme has certifiers throughout Scotland, including the Islands, the scheme provider suggested that regional variation is a reflection of the types of projects being undertaken.

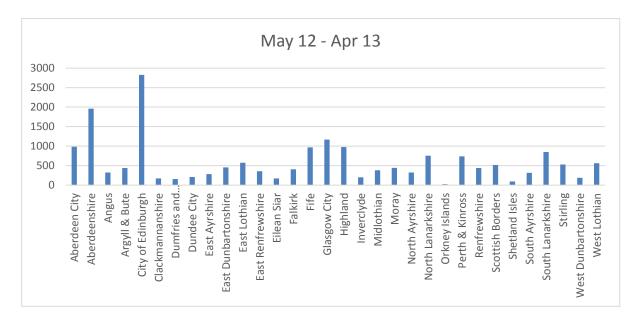


Figure 3: Certificates of Design (Building Structures) by Local Authority, 2012/13

2.2.6 Figure 4 shows certificates issued by scheme provider as a percentage of building warrant applications by local authority. The authorities are grouped by the seven Local Authority Building Standards Scotland (LABSS) consortium which are defined below:

- Central: Clackmannanshire, Falkirk, North Lanarkshire, South Lanarkshire, Stirling;
- Clyde Valley: Argyll and Bute, East Dunbartonshire, East Renfrewshire, Glasgow City, Inverclyde, Renfrewshire, West Dunbartonshire;
- Grampian: Aberdeen City, Aberdeenshire, Moray;
- Highlands and Islands: Eilean Siar, Highland, Orkney Islands, Shetland Islands;
- South East Scotland: City of Edinburgh, East Lothian, Fife, Midlothian, Scottish Borders, West Lothian;
- South West Scotland: Dumfries and Galloway, East Ayrshire, North Ayrshire, South Ayrshire; and
- Tayside: Angus, Dundee City, Perth and Kinross.

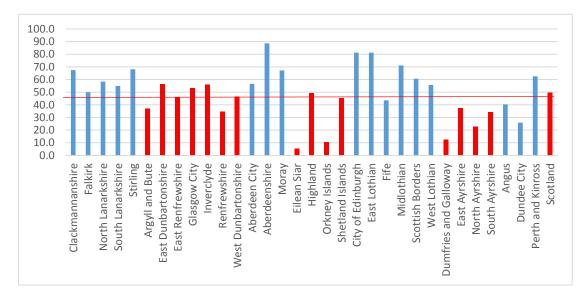


Figure 4: Certificates of Design (Building Structures) as a % of Building Warrant Applications, 2012/13

2.2.7 Across Scotland as whole, it appears that about 50% of building warrant applications are accompanied by a Certificate of Design (building structures) which is a relatively high proportion given that not all building warrant applications will have a substantial structural component. However, there is variability across authorities with relatively high proportions of warrants accompanied by a certificate in Aberdeenshire, Edinburgh, East Lothian and Midlothian. Authorities where certificates account for a relatively low proportion of building warrant applications include Eilean Siar, Orkney Islands, Dumfries and Galloway, North Ayrshire and Dundee City.

2.2.8 In terms of the regional consortium groups, there is a broad pattern to the data with groups tending to be either above average (Central, Grampian, South East Scotland) or below average (Highlands and Islands, South West Scotland). This would suggest that there may be some factors which are common to the consortium groups (e.g. customer type, project type) which are influencing the number of certificates issued.

2.3 Certification of Design (Section 6 Energy) for Non-Domestic Buildings

2.3.1 Data for this scheme are available from 2008 with 8 certifiers and 5 approved bodies registered in this year. Membership of the scheme is initially for 3 years and renewal of registration is required after this period. The number of certifiers increased sharply in 2009 to 41 and has fluctuated around this level to stand at 35 in 2013. The number of approved bodies also increased sharply in 2009 to 26 and has been relatively stable since standing at 31 in 2013. Details are shown in Figure 5.

2.3.2 It is considered that the recession may have had an impact on the number of certifiers as architects and designers were badly affected by the recession, which

coincided with the start of the scheme. There are costs¹ associated with the training and exam which may have adversely affected membership.

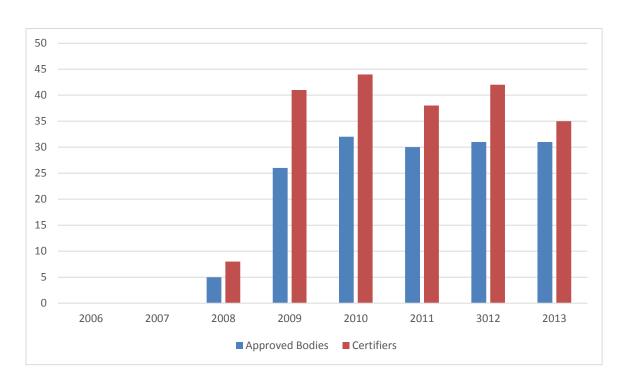


Figure 5: Certifiers and Approved Bodies Design (Energy) Non-Domestic Buildings

2.3.3 Figure 6 shows the data for the number of certificates issued. In 2009 20 certificates were issued in 2009, the average then has been just 13 per annum, - an average of 0.4 certificates per certifier. The decline from the opening year may be attributed to the recession but the overall level of activity suggests that the scheme has thus far failed to "take off". The possible explanations for this are considered below.

¹ Training costs and examination could amount to £2,000

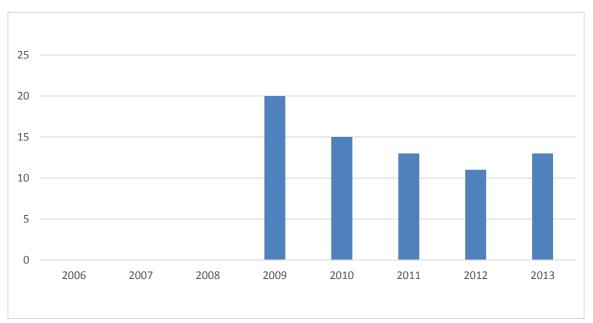
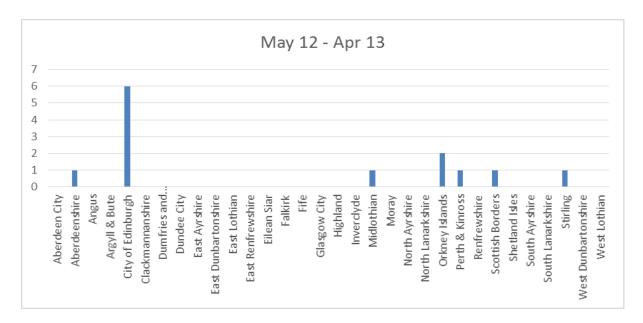


Figure 6: Certificates of Design (Energy) Non-Domestic Buildings

2.3.4 Figure 7 shows the distribution of 2012/13 certificates by local authority. Certificates have been issued in only seven authorities with Edinburgh and Orkney the only authorities where more than one certificate was received.





2.3.5 Given the very small number of certificates issued, it is not possible to analyse certificates as a proportion of building warrant applications.

2.4 Certification of Design (Section 6 Energy) for Domestic Buildings

2.4.1 Data from 2008 are also available for the domestic buildings scheme which is provided by RIAS and BRE. In 2008, RIAS had ten certifiers and ten approved bodies. BRE had four certifiers and three approved bodies. Membership of both providers increased sharply in 2009 and has been relatively static over the last few years. As at 2013, RIAS had 50 certifiers and 50 approved bodies with BRE having 25 certifiers and 24 approved bodies. Hence, the majority (66%) of certifiers and approved bodies are registered to the RIAS scheme.

2.4.2 RIAS hoped that 10% of their members would participate in the scheme, but this was frustrated by the recession and time lags in the process by which regulations became effective. RIAS still hope to build up to a level of 100 bodies. Figure 8 details membership in terms of approved bodies and certifiers between 2008 and 2013 for the two providers.

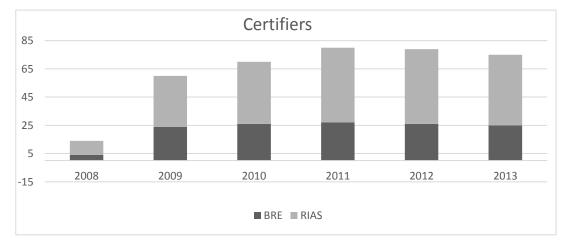
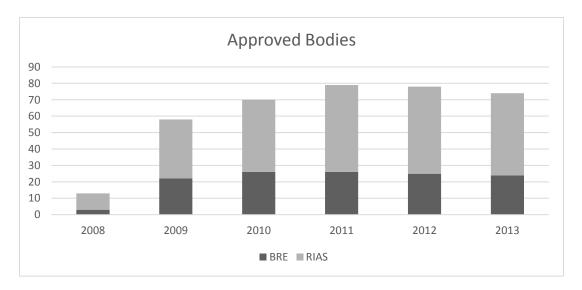
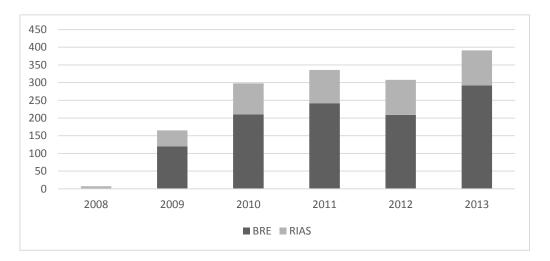


Figure 8: Number of Approved Certifiers of Design and Approved Bodies (Energy) Domestic



2.4.3 Figure 9 shows the number of certificates issued. While the number of certifiers and approved bodies has declined slightly since 2011, the number of certificates issued in 2013 was the highest for the scheme period. Of the 391 certificates issued in 2013, 75% were issued by BRE approved certifiers. Hence, although it is a minority of certificates. In 2013, the BRE scheme issued 12 certificates per certifier while the RIAS scheme issued 2 certificates per certifier.





2.4.4 Figure 10 shows the distribution of 2012/13 certificates by local authority. Only three authorities (Highland, Shetland, Perth and Kinross) had more than 30 certificates in 2012/13. Dundee and Inverclyde received no certificates in 2012/13. Most authorities received certificates from both RIAS and BRE registered certifiers, but RIAS is the dominant scheme in Scottish Borders and South Ayrshire.

2.4.5 It was suggested that the geographical pattern of certificates is affected by the location of certifiers and projects with architect involvement. Single house applications may be more likely to have designers who use certifiers for energy and this may affect the geographical distribution. It was also suggested that some local authorities may promote certification more than others.

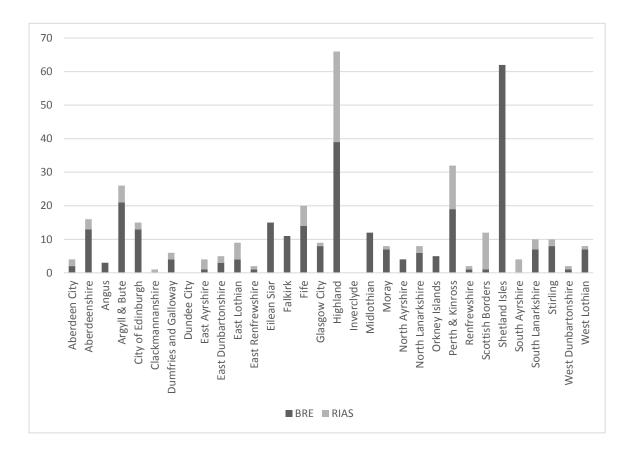


Figure 10: Distribution of Certificates of Design (Energy) Domestic by Scheme Provider and Local Authority, 2012/13

2.4.6 Figure 11 shows certificates as a percentage of building warrant applications by local authority. The authorities are grouped by the seven LABSS regional consortia listed in paragraph 3.2.6. Almost 16% of certificates were issued in Shetland and these account for almost 29% of all building warrant applications. Shetland is the only authority where the number of certificates as a proportion of building warrant applications exceeds 4%. The reasons why there has been such a take up of the scheme (in relative terms) in Shetland are unclear. As a result of Shetlands "outlier" status, the axis in Figure 11 is based on all authorities excluding Shetland.

2.4.7 Across Scotland as a whole, it appears that certificates of design (energy) for domestic buildings issued by the scheme providers account for about 1% of building warrant applications with only six authorities where certificates account for more than 2% of the building warrant applications – Argyll and Bute, Highland, Orkney, Shetland, Midlothian and Perth and Kinross. These are relatively rural authorities and three are within the Highlands and Islands regional group. Generally, rural authorities would be expected to have a higher percentage of single house applications, for which certification may be most likely to be useful.

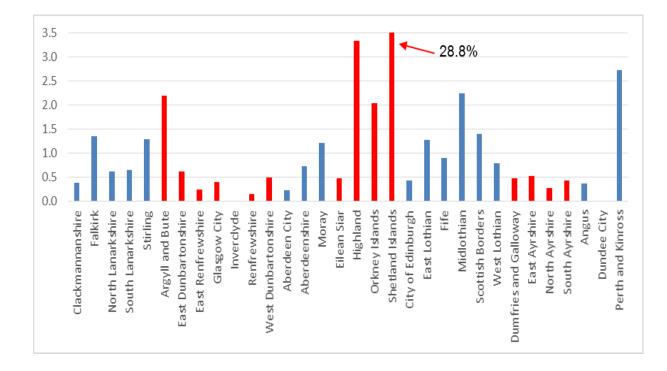
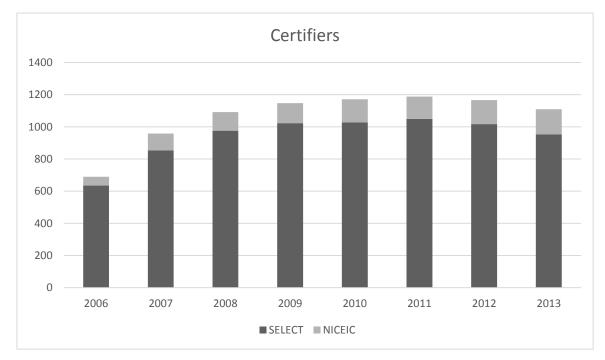


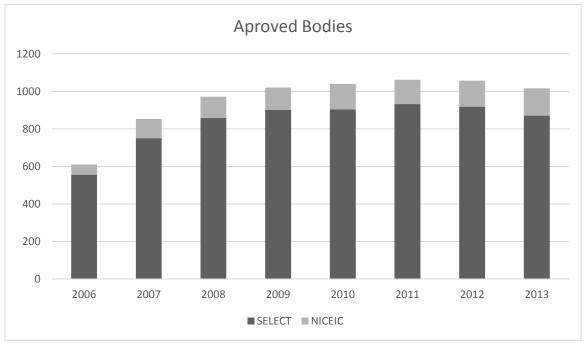
Figure 11: Certificates of Design (Energy) Domestic Buildings as a % of Building Warrant Applications, 2012/13

2.5 Certification of Construction (Electrical Installations to BS 7671)

2.5.1 This scheme was approved in 2004 and is provided by SELECT and NICEIC. Membership of the scheme is for three years with re-registration required after this period. Data are available for the period from 2006. In 2006, SELECT had 635 certifiers and 556 approved bodies. NICEIC had 55 certifiers and 54 approved bodies. Membership of both providers increased until 2011 and has started to decline since then which may be a result of the economic downturn. In 2013, SELECT had 953 certifiers and 871 approved bodies with NICEIC having 157 certifiers and 145 approved bodies. The majority of certifiers (86%) are SELECT members. Figure 12 shows the trend in membership for the two scheme providers.







2.5.2 At peak membership of the scheme, approximately 90% of SELECT members were certifiers, but this has dropped to around 75%. For NICEIC, approximately 16% of their Scottish contractors are registered to the scheme. The consultations suggest that some certificates are not renewing their membership as they are not being asked for certificates and there is therefore no need for membership. It is also difficult for electrical contractors to influence the process at the building warrant application stage as they are often not appointed at this point.

2.5.3 Figure 13 shows the number of certificates issued by provider since 2006. After an initial increase in certificates issued between 2006 and 2008, the number of certificates issued remain broadly stable at between 11,300 and 12,800 between 2008 and 2012. However, in 2013 there was a sharp reduction (-22%) in certificates issued to 9,500. The sharp rise in NICEIC certificates in 2011 reflects a major contract awarded to a NICEIC certifier.

2.5.4 The number of certificates issued is dominated by SELECT who accounted for at least 95% of certificates until 2011. However, following a substantial increase in NICEIC certificates in 2011, SELECT now accounts for 88% of certificates issued. In 2013, the SELECT scheme issued an average of 9 certificates per certifier and the NICEIC scheme issued an average of 7 certificates per certifier. It is understood that around 50% of SELECT certifiers do not issue certificates as there is no reason to do so i.e. they are not being asked for by the customer.

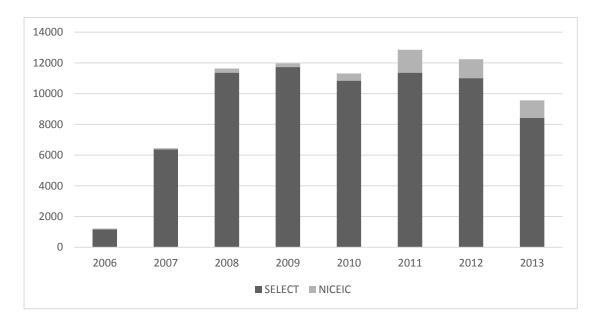
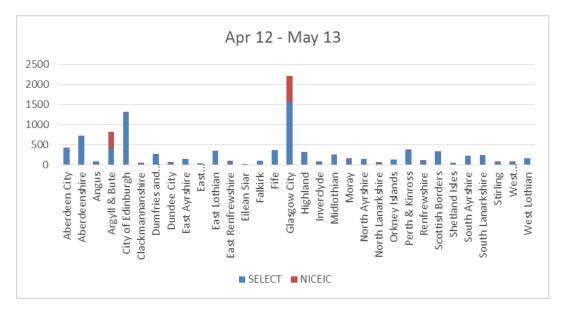


Figure 13: Certificates of Construction (Electrical) Issued

2.5.5 Figure 14 shows the distribution of 2012/13 certificates by local authority. The authorities with the largest number of certificates in 2012/13 were Glasgow, Edinburgh, Argyll and Bute and Aberdeenshire. This is not an unexpected result for Glasgow and Edinburgh give the size of those cities but Argyll and Bute and Aberdeenshire have a relatively high number of certificates for their size of population. For example, the Scotland average is 1.8 certificates per 1,000 population, but Argyll and Bute and Aberdeenshire averages are 9.3 and 2.7 certificates per 1,000 population.

2.5.6 Figure 14 shows that Argyll and Bute is one of the two authorities where the NICEIC scheme is dominant, the other being Glasgow. Glasgow and Argyll and Bute together account for 94% of NICEIC certificates with Scottish Borders and Edinburgh the only other authorities receiving more than 10 NICEIC certificates. Eleven authorities received no certificates from NICEIC registered certifiers.

Figure 14: Distribution of Certificates of Construction (Electrical) by Scheme Provider and Local Authority, 2012/13



2.5.7 SELECT certifiers issued certificates in all authorities, although Glasgow, Edinburgh and Aberdeenshire had the largest numbers of certificates and together account for 42% of all SELECT certificates.

2.5.8 The number of certificates of construction (electrical) issued by the scheme providers as a proportion of building warrant applications is shown in Figure 15. Across Scotland as a whole, certificates of construction (electrical) account for 25% of building warrant applications in 2012/13. In three authorities, certificates of construction (electrical) accompany a majority of building warrant applications – Glasgow (100%), Argyll and Bute (68%) and Orkney Islands (52%).

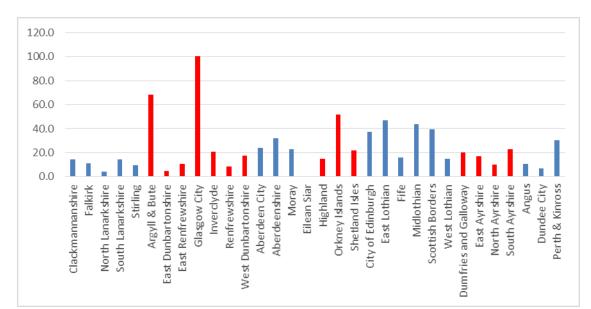


Figure 15: Certificates of Construction (Electrical) as a % of Building Warrant Applications, 2012/13

2.5.9 The authorities in Figure 15 are grouped by LABSS regional consortia. While there is some variation within consortia groups, all authorities in Central and South West Scotland have below average proportions of certificates as a percentage of building warrant applications, while the majority of authorities in South East Scotland have above average proportions.

2.6 Certification of Construction (Drainage, Heating and Plumbing)

2.6.1 This is a relatively new certification scheme with data being available for the year ended April 2011 onwards. In this first year there were 46 certifiers and 32 approved bodies. The number of certifiers and approved bodies has increased each year and stood at 62 certifiers and 46 approved bodies in 2013. The number of approved bodies is approximately 10% of SNIPEF's membership in Scotland. The scheme is now in its fourth year, and all the firms who originally joined the scheme have renewed their membership. The relatively low proportion of SNIPEF members participating is due to the fact that much of the work of plumbing and heating firms is not subject to building warrant.

2.6.2 The number of certificates has also increased from 164 in 2011 to 575 in 2013. The trends are shown in Figures 16 and 17.

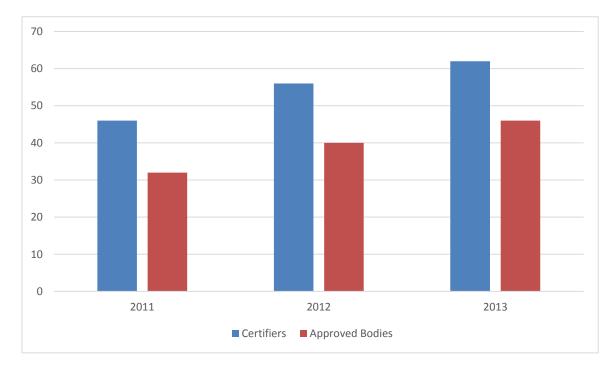


Figure 16: Certifiers and Approved Bodies Construction (Drainage, Heating and Plumbing)

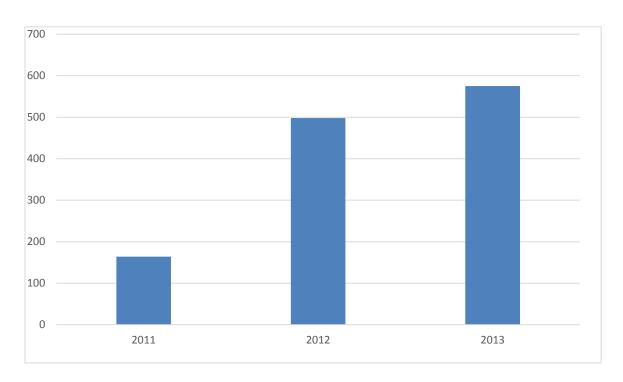
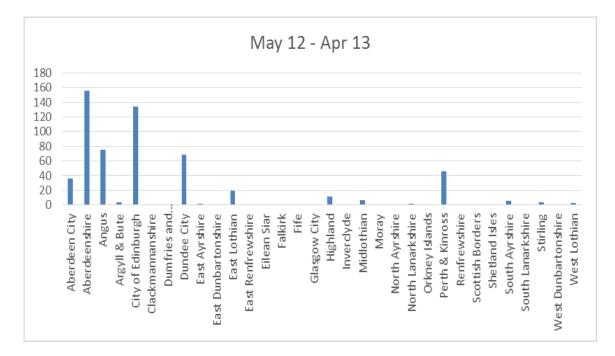


Figure 17: Certificates Construction (Drainage, Heating and Drainage)

2.6.3 The distribution of 2012/13 certificates by local authority is shown in Figure 18. The majority of certificates (75%) are concentrated in four authorities – Aberdeenshire, Argyll and Bute, Angus and Dundee. Comparison of the 2012/13 data with the original year of 2011/12 shows that these four authorities accounted for 97% of certificates issued by the scheme in its first year. While these authorities still dominate, the number of authorities in which certificates were issued has increased from eight to 16 by year three of the scheme.

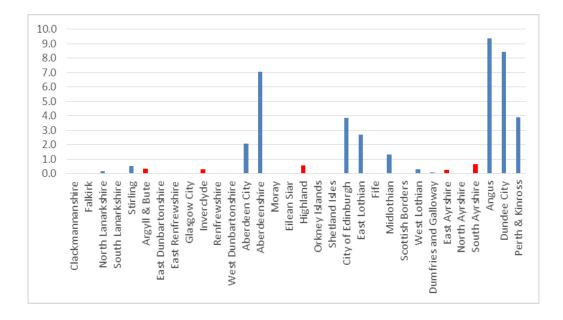
Figure 18: Distribution of Certificates of Construction (Drainage, Heating, Plumbing) by Local Authority, 2012/13



2.6.4 The certificates have been concentrated on new build housing sites with housing developers being the main customers. Housing developers are seen as the main growth market. According to SNIPEF almost all certified work is on drains.

2.6.5 Figure 19 shows certificates issued as a proportion of building warrant applications by local authority with authorities grouped by the LABSS regional consortia as above. Across Scotland as a whole, certificates of construction (drainage, heating, and plumbing) accompany 1.5% of building warrant applications. There are only six authorities which have an above average proportion of certificates – Aberdeen, Aberdeenshire, Edinburgh, East Lothian, Angus, Dundee and Perth and Kinross. When considered in their regional groups, certificates of construction (drainage, heating and plumbing) are more prevalent in the Grampian, South East Scotland and Tayside consortia. There are very few certificates issued in any other regional group. This suggests that this certification scheme is influenced by factors which are common to these consortia groups or area e.g. the prevalence of new build housing sites, presence of certifies and the level of local authority encouragement.

Figure 19: Certificates of Construction (Drainage, Heating, Plumbing) as a % of Building Warrant Applications, 2012/13



2.7 Summary

2.7.1 From the review of scheme statistics, the Certification of Design (building structures) Scheme is the only scheme which has had a substantial impact with the majority of building warrant applications being accompanied by a certificate. This scheme provides a benchmark for what the other schemes could strive to achieve.

3.1 Introduction

3.1.1 Drawing on the intelligence gathered from the consultations with all scheme providers, this section examines the factors which have contributed to the success or otherwise of the schemes.

3.2 Use of the Scheme

3.2.1 From Section 3, it is clear that the most successful certification scheme is the Certification of Design (building structures) scheme where about 50% of all building warrant applications are accompanied by a certificate. Given that not all building warrant applications will have a substantial structural component, the proportion of certificates accompanying applications with a structural component will be higher.

3.2.2 The success of this scheme can be attributed to the benefits it offers to the customer. All building warrant applicants receive a 10% reduction in the building warrant fee, but the greatest benefit is felt to be the reduction in time taken to grant a warrant, which enables work to start on-site more quickly. If a certificate is not provided, local authorities will have to check the calculations. This adds to the time taken to process applications and can add to local authority costs if the calculations have to be sent to an external party.

3.2.3 The Certification of Design (building structures) Scheme and the Section 6 – Energy schemes have a direct effect on the speed with which the building warrant is approved and hence, when work can start on site. All other construction schemes have a bearing on the processing of the completion certificate and while this can be considered a benefit, it does not appear to influence the use of certification.

3.2.4 Hence, the Certification of Design (building structures) scheme offers a clear advantage to customers and also to authorities - it is an area where the local authorities may find it difficult or expensive to provide the service.

3.2.5 Of the remaining schemes, the Certification of Construction (electrical) scheme accompanies approximately 25% of building warrant applications while the Certification of Design (section 6 energy) for domestic and non-domestic buildings and Certification of Construction (drainage, heating and plumbing) accompany less than 1% of building warrant applications.

3.2.6 The lack of success of the other schemes can be attributed to a lack of advantage to the customer of having the various certificates. This reflects a number of issues including:

 Alternative forms of compliance are readily available and the faster processing time which should be associated with submission of a certificate may not be material. For example, the electrical BS 7671 is readily accepted by local authorities.

- The financial incentives associated with certification are not significant. This is particularly true of the certificates of construction where the reduction in building warrant application fees is 1%. This is also linked to the timing of the applications as notice of the intention to submit certificates has to be made at the building warrant application stage. At this point the customer may not know which contractors will be undertaking the construction work.
- Customers may not be aware of the other benefits of the scheme such as a guarantee of quality of work in addition to the fee reduction and faster processing times.
- The role of local authorities is also important in the success of certification. It was suggested that local authorities may be more willing to promote the Certificate of Design (building structures) Scheme than the other schemes. This could reflect a history of certification in structural engineering which pre-dates the current certification scheme or the difficulties/costs involved for some local authorities in checking structural calculations when a certificate is not provided. For the other schemes, the local authorities were felt to take a more neutral position and did not provide active encouragement of certification.

3.3 Advantages and Disadvantages of Certification

3.3.1 The relevant person (normally the owner of the building) is responsible for selfcertifying compliance with building regulations. Certifiers of design and construction contribute to this process by providing comfort that suitably qualified and experienced building professionals and tradesmen can help ensure specified works comply with the building regulations.

3.3.2 The advantage of membership of the Certification of Design (building structures) Scheme is the service its members can offer to their clients, particularly the reduction in verification processing time for a building warrant. For individual certifiers, memberships of the scheme is considered good for their CV as it encourages them to upgrade skills. A small number of engineers who work for local authorities are also registered for their own professional development.

3.3.3 Certification of Design (energy) provides the customer with a guarantee of reduced verification processing times, a guarantee of quality of work and a guarantee that the design will perform as well as those solutions which follow the guidance contained in the technical handbooks. It provides assurance that the work has been undertaken by a suitably qualified person to a high standard. Membership of the scheme should be a marketing advantage to the certifier as they can emphasise the quality, rigor and standards of the schemes. However, one scheme provider felt that membership is not proving to be a great advantage in the market place. Clients do not see an advantage in using a scheme which they consider involves extra cost and is neither required by local authorities nor provides a clear benefit in securing completion certificates. The other scheme provider suggested that issuing certificates should not be an onerous task for certifiers as it follows processes that would be followed anyway and should be a profitable activity.

3.3.4 For the Certificate of Construction (heating, drainage and plumbing) Scheme the certification process was felt to speed up the process of contract completion for the

member firms, which helps to secure earlier payment, although certification is not really a profit making process. The most useful aspect of the scheme appears to be for drains. The ability to use the Scottish Government logo is considered an advantage of the scheme. No real disadvantages were identified, but the relatively small amount of "warrantable" work limits the appeal of the scheme.

3.3.5 The Certification of Construction (electrical) Scheme is felt to raise standards and quality of work, but this is not understood or required by the customer as certificates are not being requested. Certifiers benefit from the scheme in terms of their knowledge of regulations, but if they are not being asked to provide certificates, they are not at an advantage in the market place.

3.3.6 As with the heating, drainage and plumbing scheme there is also a significant amount of work which does not require a building warrant, some of which can have a substantial electrical component. This raises the issue of whether certification should be extended to Schedule 3 work.

3.3.7 In terms of disadvantages of scheme membership all schemes undertake an audit of the certifier once every 3 to 5 years to ensure that certifiers are meeting the standards expected, which has a time implication for the certifiers. No other disadvantages were highlighted.

3.4 Increasing Membership of the Schemes

3.4.1 The Certification of Design (building structures) Scheme has a high penetration level in terms of the number of chartered engineers who meet the criteria for membership and it is considered that there would only be scope for marginal increases in membership. The scheme is not actively promoted because eligible engineers know about it and so there is no need for promotion.

3.4.2 The Certification of Design (energy) Scheme for domestic and non-domestic buildings run by BRE has a diverse range of professionals from architects to technicians and designers as members which makes marketing more difficult as they are targeting a broad range of potential members, rather than just members of a professional body. BRE try to avoid competing with RIAS for members. The cost of training combined with the recession may have adversely affected scheme take-up, but building regulations are increasing in complexity, which should lead to an increased demand for certification and encourage growth in membership.

3.4.3 The Certification of Construction (electrical) Scheme has seen membership decline in recent years, which reflects the demand for certificates from customers. Some 50% of SELECT scheme members do not issue certificates because they are not required. For membership to increase, the industry needs to see value in being a certifier and that will require certification to be "pulled" from the customer/local authority end. At present the schemes are being "pushed" by the providers but that is not sufficient for success. All relevant parties need to contribute and help improve and build on the success of the schemes to date.

3.4.4 If certificates of construction (both electrical and plumbing) were extended to Schedule 3 work there is likely to be an increase in compliance with the building regulations and this would encourage more membership.

3.4.5 There is potential to increase membership but there needs to be a business benefit to joining the scheme. Potential members need to see that they will be able to win more work and increase their income by joining the scheme and that requires certification to be considered the norm.

3.5 Raising Awareness and Promotion of the Schemes

3.5.1 The Certification of Design (building structures) Scheme is not actively promoted by the scheme provider to potential members. Chartered engineers with the relevant experience would know of the scheme and the benefits it provides. Certifiers promote the scheme to clients by highlighting the time savings that can be made in securing a warrant. The 10% reduction in fees is not considered a material incentive. The limited promotion undertaken by the scheme provider highlights that if the scheme is "right", it will promote itself.

3.5.2 The other scheme providers have tried a range of promotional activities to both potential members and potential customers. Examples of promotional activities include:

- Promoting membership of Certificate of Construction Scheme to contractors in Scotland applying for NICEIC membership;
- Promotion of the SELECT scheme through leaflets to all local authorities, architects and surveyors; television advertising and roadshows;
- Direct marketing by BRE to firms submitting building warrant applications; leaflets/promotion to building standard departments in local authorities; a pilot in one local authority which monitored planning applications online and targeted building warrant applicants; trade shows and conferences.

3.5.3 The promotional activities undertaken by the schemes (excluding building structures) are wide ranging and suggest that the lack of success of these schemes reflects other factors. Further promotion from the scheme providers alone will not be sufficient to increase membership of the schemes and the number of certificates issued.

3.5.4 If scheme providers are "pushing" certification, there also needs to be promotion which "pulls" people in the direction of certification. This needs to come from central and local Government. The Scottish Government needs to raise awareness of the scheme and promote certification as the way forward. Local authorities also need to promote certification with the building warrant application. All relevant parties need to contribute and help improve and build on the success of the schemes to date. This is considered further in Section 4.6 below.

3.6 Scheme Development

3.6.1 Certification should be seen as the way forward and the norm as the schemes promote quality and raise standards. However, with the exception of the Certificate of Design (building structures) Scheme, the schemes need to be made more attractive to their customers. Customers need to have a clear benefit for choosing certification which could include:

 Certificates are expected and there will be time penalties associated with nonsubmission of a certificate; and/or • Fees for building warrants will be charged on the basis that certificates are provided for the five scheme areas (if appropriate to the application). Failure to submit a certificate will incur a financial penalty.

3.6.2 The knowledge that a certificate is expected or there will be a financial cost and/or time delay will drive architects/building warrant applicants to seek certifiers as part of the contract process. This should provide greater incentives to use certifiers.

3.6.3 A number of other measures should also be developed to support certification including:

- Certifier Database: The database currently provides information on registered certifiers across the five schemes, but it needs better promotion. It could be marketed as part of a brand that promotes certification and becomes known as the place to find approved contractors.
- Changes to Fees: As suggested above, the current financial incentives around certification appear negligible in encouraging use of the schemes. A change to the fee structure which assumed that certificates will be supplied and therefore a charge would be incurred if a certificate was not produced, would protect fee levels for local authorities and provide an incentive to use certification, particularly if the additional charges were significant. Changes to the fee structure of building warrant applications would be required and careful consideration would require to be given to the appropriate "additional" charge for non-certified work.
- Extend certification to Schedule 3 Work: For the two certification of construction schemes there is a substantial amount of work which is not subject to a building warrant and hence a certificate is not required. The certification schemes could be extended to cover Schedule 3 work, which would raise quality and standards on these works and increase the demand for certification.
- Include in Public Spending Procurement: Could certification become compulsory for public sector procurement? Construction procurement is a specialist area and including certification as a pre-requisite would help contribute to improved standards.

3.6.4 A number of providers suggested that targets for certification should be set for local authorities, although this would raise issues around monitoring of performance.

3.6.5 Many scheme providers welcomed the Ministerial event scheduled for spring and felt that this was a good time to re-energise and provide additional focus on certification. If the Minster can emphasise the Government's commitment to certification and promote it as the way forward, the scheme providers can push promotion of the individual schemes.

4.1 Conclusions

4.1.1 Of the five certification schemes in operation, the Certification of Design (building structures) Scheme is considered a substantial and clear success, with the majority of building warrant applications accompanied by a certificate. The Certification of Construction (electrical) Scheme has been less successful but the decline in members and certificates in recent years is cause for concern. This may be attributed to the economic downturn. The other schemes have yet to demonstrate success.

4.1.2 The provider of the Certification of Design (building structures) Scheme undertakes very little promotion of the scheme which highlights that promotion is less important in terms of success if there are clear advantages or benefits from using the scheme.

4.1.3 For the other four schemes to reach the level of success of the building structures scheme there will need to be change "across the board". While the scheme providers argue that they do promote their schemes, the effectiveness of that promotion requires critical scrutiny. More encouragement from the top down, specifically from central and local government. It is important that all relevant parties (users, scheme providers, certifiers and regulators) work together to help improve and make certification more attractive in the future. Suggested measures to achieve this are listed below:

- Certification needs to be considered the "norm" with a range of other features set in place to support this position. Certification should be promoted more aggressively by central and local government, emphasising that certificates are expected for all certifiable work and there will be a clear benefit in providing the certificates. Failure to supply certificates will incur a time and/or financial penalty. The latter would require changes to the fee structure of building warrant applications and careful consideration would require to be given to the appropriate "additional" charge for non-certified work.
- Extend Certification to Schedule 3 Work: For the two certification of construction schemes there is a substantial amount of work which is not subject to a building warrant and hence a certificate is not required. The certification schemes could be extended to cover Schedule 3 work, which would raise quality and standards on these works and increase the demand for certification.
- Further promotion of the database as the place to find all approved certifiers under a simple brand would ensure searching for a certifier was a simple, straightforward task.
- Certification could also be promoted though public sector procurement by making it a requirement of tenders.