

SHED Implementation Plan

Theme	Objective (incl. Stakeholder Workshop votes)	Actions	Priority A=High C=Low	Diff-culty 1=Low 3=High	Benefits	Lead	Partner(s)	Timescale	Work-stream	Measuring Progress/Success
Baseline Data	1.1 Enhance the ability of the current portal, to achieve a comprehensive central point for historic environment information. 3 votes	1.1.1 Seek additional resources for PastMap development.	A	3	Ensure the portal is maintained and capable of meeting user needs	HES		Reviewed annually	WS 1	Record Annual PastMap User Statistics
Baseline Data	1.1 Enhance the ability of the current portal, to achieve a comprehensive central point for historic environment information.	1.1.2 Develop automated upload mechanism and/or live or near live feeds for HERs to put their data on PastMap.	B	3	Make it easier for HERs to keep their data refreshed as needed.	HES		2020	WS 1	Record Annual PastMap User Statistics
Baseline Data	1.1 Enhance the ability of the current portal, to achieve a comprehensive central point for historic environment information.	1.1.3 Add Conservation Areas to available overlays	Z	1	Greater public access to data	Completed		Completed	WS 1	Record Annual PastMap User Statistics
Baseline Data	1.1 Enhance the ability of the current portal, to achieve a comprehensive central point for historic environment information.	1.1.4 Add World Heritage Sites to available overlays	Z	1	Greater public access to data	Completed		Completed	WS 1	Record Annual PastMap User Statistics
Baseline Data	1.1 Enhance the ability of the current portal, to achieve a comprehensive central point for historic environment information.	1.1.5 Add Marine Protected Areas to available overlays	Z	1	Greater public access to data	Completed		Completed	WS 1	Record Annual PastMap User Statistics
Baseline Data	1.1 Enhance the ability of the current portal, to achieve a comprehensive central point for historic environment information.	1.1.6 Increase resilience of PastMap on multiple platforms	A	2	Make it easier for HERs to keep their data refreshed as needed; Greater public access to data	HES		Ongoing	WS 1	Record Annual PastMap User Statistics
Standards	1.2 Ensure that information is linked with or between the key data sources and other key portals. 7 votes	1.2.1 Use current concordance and data linking projects as models to extend this to other areas.	A	1		SMR Forum	MGS	Ongoing with annual reviews	WS 2	Proportion of records with concordance
Standards	1.2 Ensure that information is linked with or between the key data sources and other key portals	1.2.2 Ensure appropriate standards are in place to enable data sharing	B	1		TWG	MGS	2014-17 and reviewed biannually thereafter	WS 2	Agreed standard in place and being used
Standards	1.2 Ensure that information is linked with or between the key data sources and other key portals	1.2.3 Identify where SHED data should be embedded in other policy/advisory systems (planning, Water Framework Directive, agriculture etc.)	B	2		SMR Forum	MGS	2014-17	WS 2	Survey of appropriate documents
Baseline Data	1.3 All data sources to be available online and through web services. 7 votes	1.3.1 Target HERs that are not yet online and work with them to help achieve this.	A	3	Greater public access to data	SMR Forum		2024	WS 2	Percentage of HERs available online
Baseline Data	1.3 All data sources to be available online and through web services.	1.3.2 Aim for complete coverage of Scotland in the HER layer on PastMap	A	2	Greater public access to data	SMR Forum		2019	WS 2	Record Annual HER User Statistics
Baseline Data	1.3 All data sources to be available online and through web services.	1.3.3 Explore ways to help data holders to provide data as web services, possibly through a national portal (SE Web? PastMap?)	B	3	Make it easier to share data without duplication	SMR Forum		2017	WS 2	Record Annual Canmore User Statistics
Baseline Data	1.3 All data sources to be available online and through web services.	1.3.4 Identify funding, advisory support & timetable to achieve all HERs online	A	3	Make it easier for HERs to get their data online	HES	SMR Forum	2017	WS 2	Annual No of organisations contributing to PastMap
Baseline Data	1.3 All data sources to be available online and through web services.	1.3.5 Make Properties in Care data available online	A	2	Greater public access to data	HES		2017	WS 2	Assessment of diversity of audience being reached
Baseline Data	1.3 All data sources to be available online and through web services.	1.3.6 Explore options for linking to archive collections available online	B	2	Greater public access to data	HES	MGS	2017	WS 4	Links to archive collections
Baseline Data	1.4 Develop efficient methods for polygonisation where appropriate, for known extents of historic environment assets and for development management purposes, for example to help in managing change and for facilitating research. 6 votes	1.4.1 Scope and pilot a polygonisation project for Scotland	A	2	Provides information suitable for agri-environment and other national projects; Designed to aid skills sharing and training ;	HES	SMR Forum	2015-2017	WS 2	National % covered by each technique
Baseline Data	1.4 Develop efficient methods for polygonisation where appropriate, for known extents of historic environment assets and for development management purposes, for example to help in managing change and for facilitating research.	1.4.2 Develop a polygonisation project for HER data to complete the coverage of Scotland, and provide a linked national polygonised dataset covering undesignated historic environment sites (i.e. for use on SE Web land information search). Use DSP as a model.	A	2	Being hosted by Local Authority Services provides additional support for them; Major improvements in concordance; Helps cement roles and responsibilities	HES	SMR Forum	2017-20	WS 2	Methodology agreed and documented
Baseline Data	1.4 Develop efficient methods for polygonisation where appropriate, for known extents of historic environment assets and for development management purposes, for example to help in managing change and for facilitating research.	1.4.3 Pilot New Listed Building elements polygons	A	2	New standards tested and agreed; Provides platform for national research	HES	SMR Forum	Pilot project by 2018	WS 2	Agreed standard in place and being used
Baseline Data	1.4 Develop efficient methods for polygonisation where appropriate, for known extents of historic environment assets and for development management purposes, for example to help in managing change and for facilitating research.	1.4.4 Pilot Listed Building polygons	Z	1	New standards tested and agreed; Provides platform for national research	HES	SMR Forum	Completed	WS 2	New standard applied by HES
Baseline Data	1.4 Develop efficient methods for polygonisation where appropriate, for known extents of historic environment assets and for development management purposes, for example to help in managing change and for facilitating research.	1.4.5 Scope and pilot a polygonisation project for existing Listed Building elements	A	2	Improved quality of records	HES	HERs	?	WS 2	Successful completion of pilot
Baseline Data	1.4 Develop efficient methods for polygonisation where appropriate, for known extents of historic environment assets and for development management purposes, for example to help in managing change and for facilitating research.	1.4.6 Scope and pilot a polygonisation project for existing Listed Building curtilages	Z	0	New standards tested and agreed; Provides platform for national research	HERs		?	WS 2	Agreed standard in place and being used
Standards	2.1 Influence the development of national and international standards for historic environment data. 7 votes	2.1.1 Revise polygon technical specifications for historic environment data in Scotland	A	1	Ensure consistent and compatible data structure across datasets, increase interoperability and ease of use; Improved visibility of historic environment data in Scottish Government	TWG		Sep-16	WS 2	Technical specifications for different HE polygons have been drawn up and made available online
Standards	2.1 Influence the development of national and international standards for historic environment data.	2.1.2 Ensure data is INSPIRE compliant	A	2	Ensure consistent and compatible data structure across datasets, increase interoperability and ease of use; Compliance with Scottish Government and EU Standards	HES		Liaise with PMK	WS 1	INSPIRE compliant data; provision of viewing and downloads services for metadata
Standards	2.2 Ensure that agreed international and national standards are adhered to both within and outwith the sector. 3 votes	2.2.1 Create a list of appropriate standards, with summary information, links and compliance information; post on web page and update regularly	B	1	Make it easier to access information about standards	SMR Forum		Sep-16	WS 2	Standards page created on SHED/SMR Forum website
Standards	2.2 Ensure that agreed international and national standards are adhered to both within and outwith the sector.	2.2.2 Agree metadata standard	B	2	Create consistency across datasets	TWG		Sep-16	WS 2	Metadata standard posted online
Standards	2.2 Ensure that agreed international and national standards are adhered to both within and outwith the sector.	2.2.3 Reference museum standards and guidance for sector	B	1	Make wider sector aware of standards	MGS	TWG	Mar-17	WS 4	Standards page created on SHED/SMR Forum website
Standards	2.2 Ensure that agreed international and national standards are adhered to both within and outwith the sector.	2.2.4 Reference archives standards and guidance for sector	B	1	Make wider sector aware of standards	NAS		Mar-17	WS 4	Standards page created on SHED/SMR Forum website
Standards	2.3 Achieve consistency across the data, especially where this will assist the user. 3 votes	2.3.1 Standardize thesauri and KOS / use Linked Open Data across datasets (i.e. Seneschal project)	A	3	Consistency across historic environment data providers	TWG	FISH	2020	WS 2	Ability to cross search on PastMap
Roles and Responsibilities/ Mainstreaming	2.4 Agree protocols for data editing in order to give clarity over roles and responsibilities. 1 vote	2.4.1 HES and HERs to discuss and agree protocols.	B	3	Adopting consistent editorial protocols across the sector	HES	SMR Forum	2018	WS 3	Editorial protocols in place
Roles and Responsibilities/ Mainstreaming	2.4 Agree protocols for data editing in order to give clarity over roles and responsibilities.	2.4.2 Build on HER/HES protocol for other data curators	C	3	Clarity of roles and information	SMR Forum		2018	WS 2	Editorial protocols in place
Standards	3.1 Improve interactive abilities of the data, so that it can be used more effectively for research and managing change. 8 votes	3.1.1 Develop user-focused web services, ideally as linked open data, for existing data sources, and build them in to all subsequent developments	C	3	Data presented consistently across the sector; Allows innovative interactions with other key data providers	HES		2021 (HES Digital Strategy timeframe)	WS 1	Web services in place and being used. User survey results
Baseline Data	3.2 Identify gaps in the data and seek ways to address these.	3.2.1 Systematically fill gaps in key data sources, avoiding duplication where possible	B	3	A. Make data more complete and consistent, and so easier to use	SMR Forum		Reviewed biennially	WS 2	Measure the extent to which stakeholders are contributing knowledge/information to the evidence base – i.e. Record annual no of new records created
Audits and Process Mapping	3.3 Ensure that systems can accommodate the need for some data to be kept private, for privacy, legal and site security reasons. 1 vote	3.3.1 Audit key current systems	A	1	Identify existing mechanisms for keeping data private	HES		2017	WS 1, WS 2	Mechanisms in place to keep data private. ?Number of breaches
Audits and Process Mapping	3.3 Ensure that systems can accommodate the need for some data to be kept private, for privacy, legal and site security reasons. 0 votes	3.3.2 Propose amendments to allow for private data (working within legislative constraints, e.g. Data Protection; FoI; etc.)	B	1	Make it easier to ensure that private data is not disseminated	SMR Forum		Ongoing, reviewed annually	WS 1, WS 2	Mechanisms in place to keep data private. ?Number of breaches
Audits and Process Mapping	3.3 Ensure that systems can accommodate the need for some data to be kept private, for privacy, legal and site security reasons.	3.3.3 Adapt current systems and build appropriate privacy into new ones	B	2	Identify existing mechanisms for keeping data private; B. Make it easier to ensure that private data is not disseminated	SMR Forum		Ongoing, reviewed annually	WS 1, WS 2	Mechanisms in place to keep data private. ?Number of breaches
Audits and Process Mapping	4.1, 4.6 Agree and implement ways in which unnecessary duplication of data can be avoided and/or removed; Improve the efficiency of the creation and collation of data when it is gathered from various different sources. 1 vote	4.1.1 Explore roles of DES, OASIS, Canmore and HERs with regard to event reporting	B	3	More efficient and effective ingest of information; Better archiving and security of data	SMR Forum		As per OASIS redevelopment timetable	WS 2	Review of relationships completed and recommendations agreed and undertaken

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Audits and Process Mapping	4.1, 4.6 Agree and implement ways in which unnecessary duplication of data can be avoided and/or removed; Improve the efficiency of the creation and collation of data when it is gathered from various different sources.	4.1.2 Feed into national projects at development stage to ensure that compatible data structure and mechanisms for data transfer are in place before project starts	A	1	More efficient and effective ingest of information; Better archiving and security of data	SMR Forum	HES	Ongoing	WS 3	Review of number of such projects against number with agreement at development stage
Audits and Process Mapping	4.1, 4.6 Agree and implement ways in which unnecessary duplication of data can be avoided and/or removed; Improve the efficiency of the creation and collation of data when it is gathered from various different sources.	4.1.3 Suggest that the SHED strategy is included in project designs for HLF, HES and AHRC.	A	1	More efficient and effective ingest of information; Better archiving and security of data	HES		Ongoing	WS 2	Agreement reached with funders to refer to SHED; audit undertaken
Audits and Process Mapping	4.1, 4.6 Agree and implement ways in which unnecessary duplication of data can be avoided and/or removed; Improve the efficiency of the creation and collation of data when it is gathered from various different sources.	4.1.4 Devise suitable requirements for digital data creation and archiving as part of the planning process, and encourage local authorities to apply these to archaeological conditions	C	3	More efficient and effective ingest of information; Better archiving and security of data	SMR Forum		2017	WS 2	Requirements devised and agreed, and implemented in planning conditions
Audits and Process Mapping	4.1, 4.6 Agree and implement ways in which unnecessary duplication of data can be avoided and/or removed; Improve the efficiency of the creation and collation of data when it is gathered from various different sources.	4.1.5 Compile a list of current online information sources relating to the historic environment	C	1	More efficient and effective ingest of information; Better archiving and security of data	HES		2016	WS 2	List produced and kept current
Baseline Data	4.2 Create conditions where the most up to date data is both available and kept up to date. 2 votes	4.2.1 See 1.1 re live or near live feeds	A	2		SMR Forum		As 1.1	WS1	Web services in place and current
Baseline Data	4.2 Create conditions where the most up to date data is both available and kept up to date.	4.2.2 Provide datasets as web services – see 1.3	B	3		SMR Forum		As 1.3	WS1	Web services in place and current
Roles and Responsibilities/ Mainstreaming	4.3 Identify and raise resources that can help achieve a prioritised list of actions arising from these aims and objectives. 3 votes	4.3.1 Review potential funding sources, e.g. EU, SG, HLF, AHRCF, Charities/foundations	A	1	Better resourcing for SHED related activities	SHED Board		Ongoing	PB	Annual amount of investment into SHED Programme; Annual geographic spread analysis of investment into SHED Programme
Roles and Responsibilities/ Mainstreaming	4.3 Identify and raise resources that can help achieve a prioritised list of actions arising from these aims and objectives.	4.3.2 Apply for funding, individually or collectively	A	3	Better resourcing for SHED related activities	SHED Board		Ongoing	PB	Annual amount of investment into SHED Programme; Annual geographic spread analysis of investment into SHED Programme
Audits and Process Mapping	4.4 Establish processes and procedures that can ensure the security of data from unauthorised access and/or accidental deletion or corruption. 1 vote	4.4.1 HES to become MEDIN DAC	Z	3	More efficient and effective management of archive and data	HES		Completed	WS 1	Mechanisms in place to secure data; Auditable process for custodianship; Auditable process for Disaster/Emergency/ Business Continuity planning
Audits and Process Mapping	4.4 Establish processes and procedures that can ensure the security of data from unauthorised access and/or accidental deletion or corruption.	4.4.2 HES to achieve data Seal of Approval and Trusted Digital Repository Status	B	2	More efficient and effective management of archive and data; provides sector resilience; ensures long term preservation of data	HES		TDR - Sep-16; DSA ongoing	WS 2	Mechanisms in place to secure data; Auditable process for custodianship. ?Number of breaches
Audits and Process Mapping	4.4 Establish processes and procedures that can ensure the security of data from unauthorised access and/or accidental deletion or corruption.	4.4.3 Prepare, disseminate and assist in the implementation of Disaster/Recovery Plans	B	2	Provides sector resilience; ensures long term preservation of data	HES		2017	WS 2	Auditable process for Disaster/Emergency/ Business Continuity planning. ?Number of breaches
Standards	4.5 Create the facilities to ensure the long-term curation, readability and availability of data. 1 vote	4.5.1 Discuss potential for long-term data security/readability relationship between HERs and other data holders, and HES	B	2	Data is discoverable, archived and secure	HES		2021 (HES Digital Strategy timeframe)	WS 2	Data security confirmed by data holders
Standards	4.5 Create the facilities to ensure the long-term curation, readability and availability of data.	4.5.2 HES to achieve Data Seal of Approval and to become a Trusted Digital Repository	B	2	Data is discoverable, archived and secure	HES		TDR - Sep-16; DSA ongoing	WS 2	DSA and TDR achieved and maintained
Roles and Responsibilities/ Mainstreaming	5.1 Raise awareness of the existence, uses and value of Scotland's historic environment data. 4 votes	5.1.1 Produce and implement a Communications Plan for the SHED Strategy	A	2	Greater public access to information	SHED Board		2016	WS 3	Comms Plan devised and implemented. User Survey results
Roles and Responsibilities/ Mainstreaming	5.1 Raise awareness of the existence, uses and value of Scotland's historic environment data.	5.1.2 Identify & target key political support to achieving above outcomes	B	2	Greater public access to information	SHED Board		Ongoing	WS 3	Comms Plan implemented for local and national decision-makers. User Survey results
Roles and Responsibilities/ Mainstreaming	5.1 Raise awareness of the existence, uses and value of Scotland's historic environment data.	5.1.3 Continue to promote the SHED Strategy through the emerging Archaeology Strategy and other shared initiatives	B	2	Promotion of a research ethos	SSAC		Ongoing	WS 3	SHED mentioned and reported on in Archaeology Strategy Action Plan
Roles and Responsibilities/ Mainstreaming	5.2 Seek opportunities and identify resources to train professional and non-professional users in the use of Scotland's historic environment data. 3 votes	5.2.1 Tie in to implementation of the Skills aims of Scotland's Archaeology Strategy, including professional training, secondments and community training	B	2	Improved skills	SSAC		Ongoing	PB	Assessment of number and spread of accredited professionals; Annual No of volunteer training events and number of attendees; Annual No of professional skills training events and number of attendees; Annual No of placements/secondments
Roles and Responsibilities/ Mainstreaming	5.2 Seek opportunities and identify resources to train professional and non-professional users in the use of Scotland's historic environment data.	5.2.2 Support volunteer training in the creation and use of historic environment data within community engagement/training initiatives	B	2	Improved access to knowledge	HES	SMR Forum	Ongoing	WS 2	Assessment of number and spread of accredited professionals; Annual No of volunteer training events and number of attendees; Annual No of professional skills training events and number of attendees; Annual No of placements/secondments
Roles and Responsibilities/ Mainstreaming	5.3 Initiate a programme of user feedback and engagement in order to identify demands that may be fulfilled through the SHED initiative. 1 vote	5.3.1 Focus/user group meeting plus additional surveys, etc. as required	B	2	Better understanding of user wants and needs	SHED Board		Ongoing	WS 3	No of user engagement exercises; Positive/helpful feedback received. User Survey results
Roles and Responsibilities/ Mainstreaming	5.3 Initiate a programme of user feedback and engagement in order to identify demands that may be fulfilled through the SHED initiative.	5.3.2 Consider creation of a Stakeholder Group	B	2	Better understanding of user wants and needs	SHED Board		2017	WS 3	No of user engagement exercises; Positive/helpful feedback received. User Survey results
Roles and Responsibilities/ Mainstreaming	5.4 Help others to create data and devise data sources through User-Generated Content (UGC) that has the best fit with agreed standards and principles of Scotland's Historic Environment Data. 11 votes	5.4.1 Embed good practice standards in major initiatives such as Scotland's Urban Past	B	2,3	UGC data more usable and consistent	SHED Board		Ongoing	WS 2	No of new or updated records through UGC
Standards	5.5 Produce guidelines relating to Intellectual Property Rights in order to help avoid copyright and reproduction issues. 1 vote	5.5.1 Produce guidelines for different users on IPR/copyright, and post on (or link to) SHED website	B	1	Clarity of rights	HES		2017	WS 2	Datasets openly available as per Open Data Strategy. Guidelines produced and kept up to date
Standards	5.5 Produce guidelines relating to Intellectual Property Rights in order to help avoid copyright and reproduction issues.	5.5.2 Obtain best practice guidelines for different media	B	1	Clarity of rights	SMR Forum		2017	WS 2	Datasets openly available as per Open Data Strategy. Guidelines produced and kept up to date
Standards	5.5 Produce guidelines relating to Intellectual Property Rights in order to help avoid copyright and reproduction issues.	5.5.3 Support the Open Access Strategy for the sector's publications	B	1,2,3	Accessible Data	SMR Forum		Ongoing, reviewed annually	WS 2	Datasets openly available as per Open Data Strategy
Standards	5.5 Produce guidelines relating to Intellectual Property Rights in order to help avoid copyright and reproduction issues.	5.5.4 Implementation of Scottish Government Open Data Strategy 2015	A	2	Data contributes to Scotland's Digital Data Future; Accessible Data	SMR Forum		2017 for 3* data	WS 2	Datasets openly available as per Open Data Strategy
Baseline Data	5.6 Encourage the enhancement of content and improve coverage, and provide guidance on how the data all links together. 6 votes	5.6.1 Develop and guide structured/virtual volunteering (crowd-sourcing projects) to help fill the gaps in data	B	2	Increase in useful/usable data available	SMR Forum		Development 2014-17, Projects 2017-24	WS 2	Number of records with enhanced content
Baseline Data	5.6 Encourage the enhancement of content and improve coverage, and provide guidance on how the data all links together.	5.6.2 Develop data links and linked data, and explain how they can be used	A	2	Better joining up between existing databases	SMR Forum	HES	Ongoing with annual reviews	WS 2	Number of records with enhanced content
Baseline Data	5.6 Encourage the enhancement of content and improve coverage, and provide guidance on how the data all links together.	5.6.3 Promote concordance between records	A	2	SMR Forum/HES	SMR Forum	HES	Ongoing with priorities reviewed annually	WS 2	Number of records with enhanced content
Audits and Process Mapping	5.7 Identify and engage with new partners for the strategy as it develops. 14 votes	5.7.1 Audit and analysis of museum, archive and library datasets that can be linked or shared	B	1	Connecting historic environment information	MGS		2014-2017	WS 4	Provide evidence of partnership working
Audits and Process Mapping	5.7 Identify and engage with new partners for the strategy as it develops.	5.7.2 Recognize connections with rest of UK, EU and Worldwide	C	1	Presents a more rounded picture of historic environment assets	SHED Board		Ongoing	WS 3	Provide evidence of partnership working