# AGI Standards Committee: GEMINI Working Group

Members: Peter Parslow, James Reid (EDINA), Sean Gaffney (MEDIN), Claire Dawson (ONS), Rob Walker, Phil Trembath (CEH, from June 2015), James Passmore (BGS, from May 2017), Matt Jinman (ONS, from April 2018), Jo Cook (AGI, from Feb 2021).

Previous members:

BGS: Tim Duffy (to April 2020) CEH: Pete Vodden to 2015

ONS: Tee Parry Mar 2015 to April 2018

Les Rackham to January 2020

HS2: John Tate from April 2015 to February 2021

## Contents

Bug tracker (moved to separate file)

Decisions & Actions log / Meeting records

Issues / Questions

# Decisions & Actions log / Meeting records

Now (since 2017) with newest meetings at the top. Issues list still at the end.

## 25 February 2021

Prioritisation meeting

Present: Peter Parslow, Sean Gaffney, Rob Walker, James Passmore, James Reid

Note: John Tate has left the group

#### 1. Issue management

We will move issues management from Google document to GitHub, using <a href="mailto:agiorguk/gemini-github.com">agiorguk/gemini-github.com</a>) for "general issues", and <a href="mailto:agiorguk/gemini-schematron: The Schematron files to support GEMINI 2.3 validation (github.com)</a> for Schematron-specific ones.

Jo is migrating the old Schematron repository from <a href="mailto:AGIuk/Schematron: The Schematron files to support GEMINI 2.3 validation (github.com)">AGIuk/Schematron: The Schematron files to support GEMINI 2.3 validation (github.com)</a> (already a name change) to this new one in the new AGI organisation.

#### 2. Content management

We will wait to check what is possible under the new hosting arrangements for AGI. We may retain the ability edit the web pages online, but would prefer to create the "dynamic" ones from our own content - currently an XML file & XSLTs on Peter's laptop. Edd Lewis (BGS) has some things to show that might help.

#### 3. Version management

We will move toward "semantic versioning", with major, minor, bug fix releases (and perhaps even a fourth level of change). We didn't actually decide to change from dates as the third level to numbers, but that's what we were generally talking about.

We will continue roll up changes into "regular" releases, perhaps not more than once every six months.

We will still have to assess whether the combination of changes that we want to include in a given release is "major", "minor", or "bug fix". We may need different version/release numbering sequences for the Schematron rules and "the standard". We will need to consider more strictly what parts of which web pages are the "normative standard" and which are guidance, in order to steer our decision - and to communicate what that decisions means. We'll consider this in more detail in preparing our next release.

#### Actions:

Peter to write up a "straw man" on versioning, based on this discussion

Peter to move issues from Google to GitHub

All to analyse/tag those e.g. as "breaking"

Jo to complete moving Schematron issues from old GitHub repository to new one.

Decision: We'll look at the DD3 ones after we've "cleared the backlog"

# Other meetings to accept the DD3 change requests as "feasible" (without commitment)

## 6 August 2020

Present: Peter Parslow, Sean Gaffney, Rob Walker, John Tate, James Passmore, Phil Trembath

Apologies: Richard Duffield, James Reid (until 3pm - but then without the ability to speak!)

#### 1. what kinds of things the DD3 project is considering

Peter presented an outline & some detail of what is to come from DD3. To summarise, DD3 is likely to recommend:

- Add a normative mapping to Schema.org; This would be reflected in an additional "equivalent element" for twelve elements, with some of those being conditional.
- · Add encoding guidance advice on display in HTML with JSON-LD for web-crawlers
- Amend the general guidance in a number of ways
- · Add three new optional elements
- Add two new optional sub-elements
- Rename one element
- · Improve the definition of two elements
- Improve the guidance for five elements

We had some discussion around some of these, especially "other uses" and the use of Conformity to represent the results of the GC "Authoritative Data tool".

The plan is for an initial draft to be available for review by mid August. A further draft, taking comments into account, will be available during September. The GEMINI wg is part of the acceptance of this. Of course, after that, it is up to the group to implement it or not.

## 2. AOB

## a. Change of relationship with IST/36 and AGI

AGI Council have agreed to the proposal to take the Working Group on, from IST/36. Richard Duffield of AGI Council will join this group & IST/36.

Peter is waiting for this to come "in writing" (i.e. with a bit more detail than the email).

#### b. Use of GotoMeeting rather than Webex

AGI's preferred web meeting software is GotoMeeting. We will use this from now on (but keep the option to fall back on BSI's Cisco Webex if it doesn't work for us).

#### c. Should this group (or another) promote GEMINI more?

We think this would be better done by AGI & Geospatial Commission; we will nudge them.

## 16 March 2020

Present: Peter, Rob, Sean, James R, John, Phil Trembath (part)

#### 1. Working Group discussion on reporting to AGI Council rather than IST/36

Peter presented the discussion paper actioned at the last meeting: <a href="https://docs.google.com/document/d/13blVZ">https://docs.google.com/document/d/13blVZ</a> cWMHeg FmgUkvrceup9RISJFf5v 1z3DsCS 4/edit, and there was discussion.

Overall, the consensus was to prefer option 3 (GEMINI Working Group reporting to AGI Council) and to present it to AGI Council as 'here's what you need to do to take responsibility for GEMINI, and here's how this could benefit you'. We would also present this proposal to IST/36 (AGI Standards Committee). It should include the idea of an AGI GEMINI logo, and more mention of other standards groups in addition to BSI & OGC - MOD, IStandUK.

Action: Peter to draft this proposal document for agreement by the working group (by email) in time to be presented to IST/36 on 6th April 2020.

#### 2. Technical issues

See <u>Bug tracker</u>; we resolved 2020-01 to 2020-05 and 2020-08 to 2020-10, and partially resolved 2020-06, 2020-07, and 2020-11.

Action: Peter to implement the agreed changes within one month.

We agreed that it is sensible for the NERC Vocab server to make our terminology entries available as JSON (e.g. <a href="http://vocab.nerc.ac.uk/collection/M25/current/GEMINI/">http://vocab.nerc.ac.uk/collection/M25/current/GEMINI/</a>).

# 24 February 2020

Present: Peter, James P, Phil, Rob, Sean, Richard Duffield (AGI Council)

Les Rackham has retired from IST/36 and from the GEMINI Working Group.

#### 1. Working Group discussion on reporting to AGI Council rather than IST/36

Richard (& Peter) presented an idea under discussion between AGI & IST/36, that AGI would no longer have a Standards Committee, and that the GEMINI Working Group would be overseen directly by AGI Council.

AGI remains committed to owning GEMINI, and AGI Council wants to improve how it does this, in parallel with recognising that BSI lead on 'the rest of' de jure geo standards work in the UK.

There was a wide discussion, centred on questions as to what this change was supposed to improve. This moved towards three options: the status quo; dropping AGI Standards Committee but keeping GEMINI Working Group governed by IST/36; dropping AGI Standards Committee and transferring GEMINI Working Group to AGI.

We noted that the GEMINI Working Group is IST/36's main relationship to both UK INSPIRE and data.gov.uk.

We noted that the GEMINI Working Group needs to improve our understanding of AGI. We were pleased to hear that AGI wants the GEMINI Working Group to remain open to people who aren't members of AGI.

Action: Peter to write up the situation, options, and issues, and three draft GEMINI Working Group ToRs, in order to clarify these three options. Working Group to discuss / agree - and document what we want from AGI Council. *Draft at: draft options paper* 

#### 2. Programme for 2020

a. Remaining issues described in bug tracker

now eight including logo question

- We made decisions on three 2020-06 to 2020-08
- One needed no discussion 2020-05
- Four need further discussion 2020-01 to 2020-04
- We added another one, and discussed it 2020-09

Note: I've now started numbering them.

- b. Anything further we learn from implementations:
  - i. Astun Technology / Scottish Government / Geonetwork
  - ii. EDINA / Defra

c. recommendations from Geospatial Commission projects: Data Discoverability and others. We expect two or three project reports to include recommendations for changing GEMINI guidance.

d. both CEH and MEDIN would appreciate a discussion on how to relate the W3C PROV vocabulary to GEMINI.

e. we could do some work on the impact of moving to 19115:2014, in order to inform whoever does make that decision for UK implementations.

#### 3. Decision on preferred timing of move to AGI

We were not in a position to make this decision.

## 4 September 2019

Present: Peter, James P, James R, John T, Les, Sean, Tim

To decide: GEMINI amendments. Peter presented suggested for the following:

- GEMINI content for two new elements: Metadata standard & version name the suggested wording was revised in discussion, and agreed.
  - Action: Sean to provide wording for how to add items to the NERC vocab server Action: Peter, James, Sean to provide initial NERC vocab server entries for ISO 19115 & GEMINI, BGS profile, MEDIN profile respectively
  - Action: Just to be sure, Peter will circulate the revised suggested wording for any final comment (allowing one week final check), and send it to Jo Cook who had initiated the suggestion.
- 2. correcting the XML example for an INSPIRE keyword. Agreed.
- 3. fix a number of typos in the XML examples for Use Constraints. Agreed
- 4. Remove example Hierarchy level name instances that are not valid for INSPIRE. Agreed
- 5. Correct errors in the XML example files supplied with the Schematron document. Agreed
- 6. Discussion: do we see merit in a GEMINI logo? In general, yes. *Action:* Peter to discuss with AGI Council; Sean sent a mock up that he has used in presentations.
- 7. AOB information: The INSPIRE Reference Validator for Discovery Services is now ready for testing. Peter (as owner of the UK Discovery Service) will use that to test the reference validator.

## 12 April 2019

Present: Peter, Sean, James P, John T

Apologies: Les

#### News:

- UKME still unavailable:
- GitHub (for Schematron) AGI to decide on establishing a GitHub presence
- March release communicated

1. To decide: Metadata standard & version name - proposed by Jo Cook (in order to give clear guidance what to put in it!), and supported by Sean

Complete agreement to include these as optional elements.

At present, they are populated with a wide range of values, e.g.:

	metadataStandardName	metadataStandardVersion
UKME	ISO 19115 (UK GEMINI)	1.0 (2.2)
MEDIN profile	MEDIN Discover Metadata Standard	<version number=""></version>
MOD	MOD Geospatial Metadata Profile	1.0
BGS	NERC Profile of ISO 19115:2003	1.0

Properly, we should establish a register of profiles and their identifying strings. James reckons NERC could host that on their vocabulary server. The GEMINI records should then use a gmx:Anchor from the metadataStandardName to the relevant vocabulary entry. Action: Peter to suggest this to Jo Cook & get her views - perhaps by inviting her to a call about this.

2. To decide: INSPIRE 'Conditions for access and use' - see discussion earlier (email chain) about the guidance we've given raising issues the INSPIRE geoportal harvest check

Having looked again at the INSPIRE Technical Guidance, TG Requirement C.17, we reckon GEMINI has got this right. If the INSPIRE Validator still rejects records encoded like this, report that to them.

## 24 October 2018

Present: Peter, Rob, Les, Sean, Matt, John T, Tim Duffy, James R Apologies:

1. debate & agree (or not): suggested change for element Additional Information (Source)

Sean: Is the text within the Encoding Guidance for Additional Information Source (<a href="https://www.agi.org.uk/gemini/40-gemini/1062-gemini-datasets-and-data-series#27">https://www.agi.org.uk/gemini/40-gemini/1062-gemini-datasets-and-data-series#27</a>) a good example for people to use as an aid to understanding the element?

I ask as this text seems to provide additional information within the string itself, rather than being a note pointing to an external source — I was under the impression that additional information was not to be placed within this element and it was only in essence a signpost pointing to other references. It seems to contradict the example within the main body of the element "For full details about this dataset, see 'https://os.uk/business-and-government/products/addressbase.html'"

Peter: The ISO 19115:2003 element supplementalInformation is a character string, defined as "any other descriptive information about the dataset".

GiGateway metadata had "additional information source", so GEMINI 1 (2004) included it, with a comment that it could be a "URRL" (sic).

The INSPIRE regulation (2008) states that Resource locator "defines the link(s) to the resource and/or the link to additional information about the resource."

By GEMINI 2.1 (August 2010), the comment had been upgraded to a "general rule" – this carries on in GEMINI 2.2

But UK Location (2011) insisted that URLs should go in Resource locator (as per the INSPIRE Regulation), saying of "Additional information" "It should not be used to link to on-line resources. All resource links (other than information on fees) must be defined using "Resource Locator". For links related to fees, use the element "Use Constraints"."

Version 2 of the INSPIRE Metadata TG (2016) for some reason included the ISO 19115 supplementalInformation element, as an optional thing – presumably as it's not required by the regulation (or by ISO).

It's only in GEMINI 2.3 that we've brought the two things together – because they are both using the same ISO 19115 element. We discussed it briefly in our working group in both September 2015 & November 2017. We included it in the questionnaire we sent out about which of the 'new elements' to include. In February 2017, I perhaps mistakenly marked the issue (of reconciling the two approaches) as fixed.

Although the INSPIRE regulation suggests that Resource locator can be used to "link to additional information about the resource", the part of underlying ISO 19115 INSPIRE adopts places it firmly in the area of the metadata where one is describing how to obtain the data: MD\_Distribution > MD\_DigitalTransferOptions.online > CI\_OnlineResource.

Honouring that, and considering where we'd advise putting a link to a) further information about getting the metadata, and b) further information about the data, we concluded that Resource Locator should be used for information about how to access the dataset; other information about the dataset should be in Additional Information.

**Peter** to check the Schematron, and draft revised text for both elements.

2. review/accept GEMINI 2.3 project review document Include an introduction, stating the audience - IST/36 Needs a clearer section on the actual lessons learned. As it's an internal document, list the team / working group. Other issues/problems:

- was that it was doing two things together harmonising/consolidating two sets of documents, and updating. It may have been better to take a more clearly two stage approach.
- entered into contract with HR Wallingford without a clear idea of what we wanted; that may have been the reason is that we didn't get best value from it
- changing requirements: initially we want two flavours (pure GEMINI & INSPIRE GEMINI). ditched that split during the contract - we learned along the way.
- would have been good to get WebFoundry involved earlier, as the organisation who is hosting it, & have the web skills.

**Peter** to update the draft & circulate for approval.

3. review/accept (or not) my explanation of "Why GEMINI?", and agree how/where to publish it

Put a paragraph in the introduction briefly explaining the history of GEMINI from before INSPIRE, evolving. In particular, to include metadata for web services.

Move the last bits, about sometimes just changing the name, up to a minor section above the "UK things".

Main conclusion is it's aimed at making UK metadata more consistent & better quality - the section headings.

Move the 'some reasons' part to the top - or actually to the page that then links to it: teaser to show why people might choose to read it.

Peter to update the draft & circulate for approval. Publish as part of the GEMINI website.

4. for information / input: draft expansion of the "discovery metadata" thread from AGI Standards event 21st September

Peter apologised for not sending the document out, summarised what the document contains, and asked people to consider (when they get it!): do we want to continue, looking at the broader area of geo metadata.

Should include OpenSearch.

#### 5. AOB

Is this the AGI Metadata Working Group? No, it's a sub-group of AGI Standards Committee, which is also BSI IST/36.

## Actions / decisions by email, July 2018

Guidelines Part 1: email sent out 19th July, with v0.4 20180719, calling for objections by 30th July. One correction received & implemented (was actually an error even GEMINI 2.2). Published 31st July.

Schematron: email sent out 12th July, with rc09, calling for any objections by 20th July. One response received - agreeing to publication. James then sent a slightly revised package.

Peter: I sent that for publication - currently pending AGI action.

Project review: email sent out 5th July calling for contributions "during July"

## 12 June 2018

Present: Peter, Les, Rob, James R, John, Sean

Apologies: Matt

Matt emailed 'no objection to publication'.

Members spotted a few things; Peter to fix:

- The GEMINI summary XSL isn't producing "n/a" version control issue on Peter's PC; now in "Summary 20180612.xsl"
- The link from encoding of Resource identifier should go to section 2.1.12 in the encoding guidance. *Done in "GEMINI 20180612.xsl"*
- In the two "guidance" articles, put "being revised" done on dev server
- In 1022 (on dev): last sentence should say "was", rather than "existing" done on dev server
- In 1022 (on dev): add something about Defra sponsorship & the role of AGI Standards committee done on dev server
- Release it as "GEMINI 2.3 <date>" (in the XML, comes out in the dynamic pages) done in GEMINI\_20180612.xml
- Remove duplicate "datasets" and "services" text from top of the dynamic pages the one James suggested removing is the page title of the article, so I'm not sure I can remove it. Give it proper capitals, and remove the similar text generated by the XSL. Done in "GEMINI 20180612.xsl"

Don't have too long between 'live' and the schematron being available - or at least having a 'known' delivery date.

## 4 June 2018

Present: Peter, Matt, Sean, James Reid, Les, Rob, James Passmore

Main discussion was on the elements for 'limitations' and 'conditions' (GEMINI 25 & 26), specifically the encoding.

Actions: Peter to

- a) insert the word "accessing" in the definition of element 25
- b) change the word "detail" at the end of the fourth paragraph in the encoding, to "summary"
- c) add a description of how to handle the "conditions" case where there is no licence (or, no 'licence at a URL'), so plain text is used.

Encoding proposal at <a href="http://agi.dev.web-foundry.co.uk/gemini/1010-uk-gemini-encoding-guidance#2.2.14">http://agi.dev.web-foundry.co.uk/gemini/1010-uk-gemini-encoding-guidance#2.2.14</a>

For b) and c), silence through to the end of the week indicates consent.

As the group has not yet been able to review the changes made to the dynamic pages, after the 16 May meeting, Peter will chase WebFoundry, and convene another meeting after the XML files have been uploaded & made available.

Les & Rob reported that they are progressing with the changes to "guidelines - part 1".

# 30 May 2018

Present: Peter, Matt Jinman

Some technical problem prevented anyone else joining. Reschedule for next week.

## 16 May 2018

Present: Peter, Rob, James P, Les, Sean, John Tate, Matt Jinman, Tim

Apologies: James Reid

We went through the comments received on the release candidate, and agreed to resolve them as described at <a href="https://docs.google.com/document/d/1xkRze7KJtGdvn\_i6utMn-hunXgGkbC31xhoi0LBwkDg/edit?usp=sharing">https://docs.google.com/document/d/1xkRze7KJtGdvn\_i6utMn-hunXgGkbC31xhoi0LBwkDg/edit?usp=sharing</a>

## 30 January 2018

Present: Peter, Rob, James P, Les, Sean, James R, Tee (phone), Tim

## Progress statements

### WP3 Schematron: James P

Now working at BGS's expense. Schematron rules largely unchanged since first draft, but he's improved some of the messages. Working on a test report. Test sample is now hosted at <a href="http://ogc2.bgs.ac.uk/metadata/srv">http://ogc2.bgs.ac.uk/metadata/srv</a> (a GeoNetwork instance).

The testing has uncovered a problem in the data.gov.uk / csw.data.gov.uk interface, not strictly relevant to this project!

Has uncovered a number of instances of very short Abstracts; discussion by email of at least a minimum length. Rob: the usefulness of an Abstract is not amenable to automatic testing. Decision: test for > 100, and <> Title.

Action: Peter: need to talk to WebFoundry about hosting the schematron support 'dictionary' files.

Sean has had no time to look at the Schematron rules; may be able to. James will cast an eye over the test report. Tim pointed out that the testing is better than has been done before. Peter asked James P to focus on updating (or confirming) the Schematron documentation (i.e. the documents on how to use the Schematron files).

Peter will draft text in the 'home page', to include links to the Schematron files & documentation.

#### WP4: Rob

Has completed a consistency review, which Peter has uploaded to the development server. Still to do: check the 'change history' for each element. Nearly ready for public viewing: this will need some extra bits. Rob will also review the overall 'change history' page.

## Quality element

Les: it's possible to give a 'scope' which is different from that of the metadata record, e.g. to describe quality specific to a feature type. This would be encoded in a separate DQ\_DataQuality element, and means that the Quality Scope element could occur more than once. Peter to draft both.

Peter to migrate his element description into the GEMINI content, merging in any 'best bits' of Topological consistency.

#### Parent identifier

Guidance: "only to be used if the dataset is part of a series"; "only to be used if the service is designed to be part of a set of services" Peter to put into content.

#### Public consultation

Main focus of public review will be on the elements; Peter should be able to get the revised content to WebFoundry by 2nd February. Reasonable to assume it will be available on the live AGI site from mid/late February

We will have the content open for public review for four weeks. Advertise this through AGI newsletter, AGI Twitter, to Defra/UK Location, mailshot to those we sent the questionnaire, MEDIN will promote, Scottish SDI.

Rob, Les, and Tee happy to look through the 10 page "articles" and recommend what needs to stay/change/go. Peter to send a list of URLs.He can make the edits towards the end of February.Will also need to edit 1022 to ensure it links to all the parts we want to keep.

## AOB: Metadata Language

Add a comment / guidance that, if there is a small amount of a second language,e.g. AlternativeTitle, then 'Metadata language' should reflect the main one. Action: Peter to edit content.

#### 8 November 2017

Present: Peter, Rob, James P, Tee, Tim D. James R did not establish an audio connection Apologies: Sean

## Progress statements

#### WP3 Schematron: James P

schematron largely written; James has harvested all the records from data.gov.uk, and created sample sets; expect ready to start testing at the end of the week. He'll test the samples against the API ISO Schematron, the current (GEMINI 2.1) ones, and his new ones - acknowledging that data.gov.uk contains invalid records as well as valid ones. James has also created a Schematron file that checks 'recommendations'. All of these may be useful for INSPIRE. Tim reported that Marcus Sen will be part of the new INSPIRE validation project.

Peter will visually check the Schematron files; all should review the test report. Post meeting note: Sean will take a look at the Schematron files, from the perspective of 'completeness to contract', and whether the embedded documentation is clear.

#### WP4: Rob

Rob has looked at the Datasets & Series metadata: restructuring, and wording (for consistency and duplication). The new elements largely incomplete: will need some input on some of them. Peter is transferring the changes into the XML for HTML publication. Perhaps available to check by the end of next week.

James P wonders if the XSL engine at Web Foundry gives the same result as his locally. Will need a careful look after upload.

#### Questionnaire feedback: Peter

Peter showed the questionnaire results, and summary. This highlighted an error in his formulae, which hid 'I would not like this in GEMINI 2.3' responses. Revealing those, shows quite a view 'votes against': Peter to distribute an updated spreadsheet:

https://docs.google.com/spreadsheets/d/16qgkEQ\_eGla0mul\_CLGS5iVsiVNbfDq0cFgXeM mKtf8/edit .

Rob: some aspects work better when acknowledged to be hierarchical: e.g. you need 'quality' before adding detail, such as 'logical consistency'. Others are very close to things we've already got (supplemental information; maintenance information; identification - extent).

Discussed the elements individually (see

https://docs.google.com/document/d/1MseHSuLv2YWiYkbVy5bBjJWZZj9hPxrHhGY00dalo DQ/edit):

**Supplemental information**: already in GEMINI

**Maintenance information**: James has added this; it's recommended for all INSPIRE themes; what's the difference from current GEMINI "frequency of update"? Defra & ONS makes use of the current "frequency of update"- at the ISO 19115 level, the new INSPIRE one includes the current one, plus 'maintenance note'. *Agreed - add the new one; drop the old.* 

**Identification - Extent**: INSPIRE only want this for Hydrography; we reckon GEMINI Extent is better, because it encodes a controlled list. *We won't include this*.

Browse graphic: Rob it was in GEMINI 1 - include it again

*Don't include*: Image description, spatial representation information (only wanted for Elevation, and complex to provide guidelines & tool)

**Lineage/data source**: BGS uses "supplemental information" for this; ONS provide a lot more information in a separate User Guide. 18/36 voted for 'data source' - *include* it, but *not* 'process step' (which had more votes against than for); only described "description"

**Content information** (for a Feature Catalogue): would need comprehensive notes. People could already put a link to the feature catalogue in somewhere else. We *won't include*.

Digital transfer options (three parts): include this, as one new element.

**Data quality**: James is working on a project that does use ISO 19115 DQ reports; Peter pointed out that some INSPIRE themes want bits that can't be done in 19115. *Can't* implement "usability" in 19115; put it in Abstract. It would be good to allow a structured expression of data quality; but it is quite hard to describe the ISO 19115 DQ\_DataQuality element in way to make it user friendly!

GEMINI already includes DQ\_DataQuality, for Conformity, and is introducing Topological Consistency.

Peter will write up a general 'data quality' element, (except usability) but only in January. James has found some inconsistencies in some of them.

## 18 September 2017

Present: Peter, James, James, Sean, Tim, Tee, Rob

Apologies: Les

Brief progress statement:

 Work package 3: first (documentation) part done, so Rob could start. Started to look at the Schematron. Work package 4: Rob plans to start in early October

Late in Work Package 3, James had spotted that 'Hierarchy Level' and 'Resource type' were duplicates. Peter suggests not introducing 'Hierarchy level'.

Whether to include INSPIRE 'theme specific elements': BGS generally interested in expressing data quality. We could canvas those who have already published metadata into data.gov.uk. James R not sure that including optional elements in GEMINI will get people to actually populate them. Sean has hit that issue too. ONS more positive, although users don't always read the metadata that you do create, so metadata creators get lazy! Therefore we need more education about the reasons / benefits of metadata: it's your 'shop window'. Sean: GeoNetwork commonly uses/populates 'browse graphic'.

Peter will ask those who have published GEMINI records to data.gov.uk whether they want to use these elements. Also, do they have good 'value statements' as to why. And would they be willing to pay. Need to route questions via Sean for GEMINI, and to Tee for ONS. A thought: could make the GEMINI interface adjust to what theme you are creating. But there may not be many that really belong more to one theme than another.

Minor issues log: agreed that these look (largely) like 'consistency' things; Peter will outline to Rob, on the assumption that he will include them in Work Package 4.

ONS has a "Geography Services user forum" in London in a couple of weeks. Rob & Peter will represent AGI Standards Committee at AGI Conference on 26th October. Next meeting, a Wednesday in first half of November.

## 4 August 2017

Present: Peter, Tee, Rob, James Reid (first 25 minutes), James Passmore

Apologies: Sean, Les

James Passmore walked us through the spreadsheet of work done so far. Members provided various bits of feedback.

Question: what "function" should be given for a Resource Locator to a View service? There's an example in the INSPIRE TG which uses "information". James will prepare a (short) report of "oddities" he's found in the INSPIRE TG for us to raise via the UK Point of Contact.

Peter will try to find the "invocable service" definition & send it to James P.

Tee & Peter will provide any further comments to James by end of Monday 7th; James can/will start work on the Schematron.

## 20 July 2017

Present: Peter, Sean, James P, Tee, Les, Rob, Tim

Apologies: James R

James P showed us the work he had done so far, offline, on Work Package 3.

We discussed some specific questions, and agreed how to manage this work. James expects to complete the GEMINI changes by the end of July, and then work on the Schematron changes. He will upload this 'release candidate' by Friday 28th, and provide information by email to the working group, detailing for each INSPIRE change (as per the INSPIRE TG) which GEMINI elements he has changed. Where James is making a recommendation from a range of options, he will provide some reasoning.

Working group members will review this, and we will meet again on 4th August to approve or to request one batch of further changes.

In general, the group is content that GEMINI can be 'stricter' than INSPIRE, telling people

which options to use (for example, for best results with data.gov.uk). In a text chat during the meeting; some of us agreed that the wording for Bounding Box could be changed to "at least 2 decimal places" (as per INSPIRE).

Action  Peter  Raise question to JRC. We are minded to recommend use of the XSDs on JRC's website, as per footnote 14 of the TG ( <a href="http://inspire.ec.europa.eu/draft-schemas/">http://inspire.ec.europa.eu/draft-schemas/</a> ), but have a slight concern due to the word "draft" in the URL. Are they likely to move?	JRC response: they have submitted these "better" XSDs as a corrigendum to OGC CSW ISO AP. This was presented at OGC TC in June 2017 - hopeful that the schemas will find a proper home "at" OGC.
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## 22 May 2017 note

The work effort estimates mentioned below, but kept private were:

• WP3: 21 days / £10k "absolute maximum"

WP4: 10 days

## 15 May 2017

Present: Peter, Sean, James, Tee, Les; and for items 1 & 2: Rob, Tim, James Passmore Some members pointed out that they had not been able to access the document with detailed changes. This link should now work, at least to provide read access:

https://docs.google.com/document/d/12BbdLsrm5Mwilqhzll-

8vXoD2QIGDHhP0MmCImceqTM/edit

- 1. accept (or otherwise!) 'work package 2'
  - a. The group was content with the changes to the "home page", the "contents", and the "element summary"
  - b. There were half a dozen further corrections for Peter to make. See the Action list below for further information.
- shall we move this content to the live site. See Decision list below. This next public release should be "GEMINI 2.3 Beta", and the description should highlight that the main change is to drop the distinction between GEMINI & INSPIRE, and that it does not yet include the latest INSPIRE IR and TG changes.

Rob, Tim, James Passmore left the call.

3. decide how we will accept or choose between bids for work packages 2 & 3 We discussed our ceilings - how much effort we expect the work packages to take, and how much cost. These had been discussed by email in 24-28 April 2017. The amounts will be here after the closing date for bids. Wide ranging discussion on the "optional" thematic metadata; these are listed at C.7 in the INSPIRE TG

(<a href="http://inspire.ec.europa.eu/id/document/tg/metadata-iso19139">http://inspire.ec.europa.eu/id/document/tg/metadata-iso19139</a>). This is part of an informative annex, and describes the elements as "optional, but recommended". We had not intended them to be in scope.

If the bid for Work Package 3 includes all these and comes within cost, Peter will reconvene the group for a 'sanity check' on the bid, before going ahead.

If the bid for Work Package 3 includes all these, and therefore is more than our ceiling, we (Peter) can negotiate them out. We could include the first table of elements - several of which are already in GEMINI, but not the second (quality elements).

If we end up any of these new elements, this would impact the amount of work in Work Package 4, so Peter should invite any who have bid for that to re-calculate their bids. If there is more than one bid for either work package, Peter will reconvene the Working Group.

Action	Peter	Further element & stylesheet edits as detailed in https://docs.google.com/document/d/12BbdLsrm5Mwilqhzll-8vXoD2QIGDHhP0MmCImceqTM/edit - concerning Dataset Language (2 things), Metadata Language (2 things), Bounding Box	Done (20170515.xml) (also removed a bit more duplication between 'rules' and 'guidance' on dataset language
Action	Peter	Remove the text "; Metadata about metadata record" which the XSLT places after the element name. (Now that they are in a separate section, this is not needed).	Done (20170515.xsl)
Action	Peter	Inform the group when these changes are made, with deadline to review comment	
Action	Peter	Assuming no comment by that deadline, or after resolving comments, have the content copied to the live site (replacing the Work Package 1 deliverable), and update the text at www.agi.org.uk/gemini	
Decisio n		The above release should be called "GEMINI 2.3 Beta" (This is achieved by placing "2.3 Beta" in the version element in the XML)	
Decisio n		With the above provisos (one bid for each WP; bids within cost - potentially after negotiation on Annex C.7), Peter is authorised to request AGI to create contracts.	

## 24 April 2017

Present: Peter, Rob, Tee, Tim, James

- 1. Review & approve Peter's changes; we only looked at the 'dataset' ones, not the services
  - a. "Corresponding elements" layout: make it one table XSLT changed 2017-04-16
  - b. Rename "Common errors" to "observed errors" XSLT changed 2017-04-16
  - c. Group the "metadata on metadata" elements at the top of the pages; re-order the metadata on metadata title blocks like:

Name: Metadata data; (metadata on the metadata record) XSLT changed 2017-04-16 - also fixed the GEMINI id on Metadata Point of Contact, and moved the

expand/collapse buttons below the contents (they had confused some people, as they don't expand the contents!)

Also had to change the 'expander' divs to not depend on 'position'!

d. See <a href="https://docs.google.com/document/d/12BbdLsrm5Mwilqhzll-8vXoD2QIGDHhP0MmClmceqTM/edit">https://docs.google.com/document/d/12BbdLsrm5Mwilqhzll-8vXoD2QIGDHhP0MmClmceqTM/edit</a> for working group responses leading to actions on Peter for further fixes to individual elements

Note: I have also updated Articles 1022 (removing the "INSPIRE" bits, that would no longer work with the new XML) and 1003 (major changes). I have asked WebFoundry to upload a new XSLT, that creates something like GEMINI2.2's "Table 1" from the XML.

2. Considered "draft AGI work programme for remaining UK GEMINI 2.3 work" and procurement approach, as distributed by Peter on 20th April. Decisions & actions below. The expectation is that Work Package 3 (technical changes and schematron) will be complete by mid July, and Work Package 4 by end August. Work Package 5 simply exists to acknowledge that the working group will have some things to do before setting GEMINI 2.3 live.

Action	Peter	Further element & stylesheet edits as detailed in <a href="https://docs.google.com/document/d/12BbdLsrm5Mwilqhzll-8vXoD2QIGDHhP0MmCImceqTM/edit">https://docs.google.com/document/d/12BbdLsrm5Mwilqhzll-8vXoD2QIGDHhP0MmCImceqTM/edit</a>	Done - see that file
Action	Tim	Think about "dataset language" element in service metadata, and bring back conclusions to a future meeting	
Action	Tim	Find an example of metadata describing multiple vertical extents	
Decisio n		We will call for bids on two work packages. We see advantage in having the technical changes and schematron done by the same person/team.	
Decisio n		We will call for rates and time estimates, and contract for a maximum number of days	
Action	Peter	Revise the draft and distribute for comment - along with the AGI Ts&Cs. This distribution should exclude Tim & Rob, who intend to bid. Comments by end of week, with intention to have it on AGI website by end of week, calling for responses within three weeks i.e. by 19 May.	Emailed out 2017- 04-24

# 7 April 2017

Present: Peter, Les, Rob, Tee, Tim

1. Review & approve the remainder of Tee's changes (as per "GEMINI changes 2.2 to 2.3"):

Chang	Brief	Meeting notes
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e numbe r	description		
1	Citation details	Work in progress - not reviewed	
2	Parent identifier	<ul> <li>Needs XML encoding - add to action log</li> <li>Highlights need for process to create new GEMINI ideradd to issues log</li> <li>Perhaps needs a bit more explanation - text from the 'GEMINI changes' document about series &amp; datasets</li> <li>Agreed that GEMINI need not be constrained to the ISO 19115 definitions - we can improve on them - add to decisions log</li> <li>Highlights that it would be good to distinguish those elements which are 'metadata on metadata' - add to issues log</li> <li>Move 'rules for implementation' to 'comment</li> </ul>	
3	Digital object identifier	Work in progress - not reviewed	
4	Distribution & distributor	Accepted	
5	HTTP URIs as keywords	Accepted	
6	Resource identifier	Need to edit the fileIdentifier reference to this element to use the new name	
7	Data format	This change also applies to INSPIRE	
8	Metadata language	Done by Sean; Tee needs to merge into the same XML file	
9	Marine recommendatio ns	Withdrawn at last meeting	
10	Acronyms	<ul> <li>In the abstract, use one or two ONS examples, rather than the SSSI</li> <li>In Keywords, clarify that the acronym and full term would be two separate keywords</li> <li>In lineage, fix the copy &amp; paste error (replace 'abstract' with 'lineage')</li> </ul>	

Tee had also amended Article 1003 and 1007 to include description of these changes, and article 1007 & 1009 tables to include parent identifier.

2. We considered Rob's suggested way forward for re-structure, deciding a few things - in the decision log below. Discussion whether to restructure before or after making the changes; Peter proposed that at least the 'collapsing' of INSPIRE & non-INSPIRE be done before, in order to have less changes - discussion inconclusive. Peter to provide a re-worked sample (i.e. re-work the XML) in order to demonstrate whether this would result in less work - once Tee has completed her changes.

- 3. Agenda items to carry forward:
  - discuss & agree or amend Peter's 'proposed style guide & headings'
  - agree who / when for next work package

After most people had to leave, we discussed the possibility of BGS doing "the INSPIRE changes" and the schematron changes as a paid work package. Peter to check whether AGI has the money.

Action	Peter	Doodle poll for next meeting, as we over ran.	http://doodle.com/pol l/86327n2t2gcvpchx
Action	Peter	Collapse the INSPIRE and GEMINI bits of the XML together, to see whether it would be less work to do technical changes after that. Depends on XML file from Tee - preferably with her changes made.	File received from Tee merge INSPIRE into GEMINI, resulting in GEMINI_2017- 412.xml, which is accessible via http://agi.dev.web- foundry.co.uk/gemini /1027-gemini-v2-2- datasets-and- dataset-series and http://agi.dev.web- foundry.co.uk/gemini /1028-gemini-v2-2- services
Action	Peter	Check whether AGI has money to pay for work packages	AGI have invoiced Defra, and are content for us to spend (within the budget!)
Decisio n		Add 'changes since GEMINI 2.2' to each element	
Decisio n		Drop the comparison with eGMS	Removed from XSLT 2017-04-16
Decisio n		Remove the "comparison with INSPIRE", because they are almost all equivalent. Mention any differences in comments.	Actually, only 17/31 are the same
Decisio n		Add "corresponding ISO 19139 element", with XPaths	XSLT changed to allow this - but I've only added one (Title)
Decisio n		Change the section "comparison with " to "corresponding ISO 19115 element"	XSLT introductory word changed
Decisio n		GEMINI need not be constrained to the ISO 19115 definitions - we can improve on them	

## 27 March 2017

Present: Les, Rob, Sean, Tim, Tee, James (until 15:00)

We quickly discovered that Peter had sent the wrong XML file to Tee & Sean, dating from before the 'de-duplication' that he completed after the meeting on 15th Feb. The correct file is on Joomla (administrator login to development site).

Tee was only phoning in, so Peter shared his screen. We went through the changes that Tee had made, covering most of the items in "GEMINI Changes 2.2 to 2.3". Decisions & actions noted below.

We discussed the new structure, based on the document Les had circulated. We noted that we had introduced the "INSPIRE" use cases & actors to lean towards GEMINI "just" being discovery metadata, whilst INSPIRE is adding other elements. Data publishers prefer to create one metadata record. The declared purpose of GEMINI 2 (& 2.1, 2.2) was to support INSPIRE. We haven't found any community creating GEMINI records without wanting to satisfy INSPIRE (although we could still think of possible examples: metadata for programmes; metadata in Welsh). We think that we will need to let a contract to someone (probably someone on the working group) to make all these changes. It may be best to make the technical changes first, and then restructure. Decisions & actions noted below.

Decisio n		Change 9 "Marine geospatial recommendations": cancel the changes to elements 16 & 17: these elements already reference the EPSG registry - no change required.	
Action	Tee	Complete the "GEMINI changes 2.2 to 2.3" in both the XML & static pages - amended as decision above	
Decisio n		We will drop the distinction between the "GEMINI" and "INSPIRE" use cases & actors. Those few places where guidance could differ will be handled by notes, comments, or conditions. That said, we will not drop the distinction from the XML content (yet).	
Action	Peter	Propose style guide & headings for the consolidated static pages	Completed
Action	All interest ed	Contact Peter if interested in (& available to) making the structural changes to the static pages.	
Action	All	Next meeting: 09:30 (to 11:00) 7th April	Done

## 17 March 2017

Present: Les, Rob, Tee, Tim, James

Apologies: Sean - unfortunately, off sick for much of the time since we last met Tee showed the one page she had edited - using Joomla administrator interface, as front end editing wasn't working. This highlighted that work done by WebFoundry has broken our stuff in work: CSS styling (presumably the way the XSLT is now applied), and the anchor links.

Tee agreed to make the static & XML changes in parallel, which may well be easier. Les raised that the overall structure of the documents remains unchanged, and isn't all that logical. Rob & Les raised that quite a bit of 'intelligent de-duplication' could be done within many of the elements - this needs to be after Tee's action

Action	Peter	Send XML & XSLT to Tee (unless Sean is able to send the one he has slightly changed)	Completed 17th March; and Sean sent his too
Action	Tee	Attempt the changes required in both the XML & static pages.	
Action	All	Meet again 27 March 2:30	
Action	Les	Propose a new overall structure	Completed 16th March
Action	?	Intelligent de-duplication, in the XML file, after Tee's action.	
Action	Peter	Put the more recent entries in this file to the top.	Completed 17th March

## 27 February 2017

Present: Peter, Rob, Les, Tee, Tim, Sean

One out of the four "sets" of changes: "GEMINI changes 2.2 to 2.3".

The others to do later: INSPIRE late 2013 TG; INSPIRE new TG, and the issues below. **Citation details**: use case is specific to the Title element - how to encode a DOI for a dataset:

Discussed whether it is also relevant to the Conformity statement; also in Extent **ParentIdentifier**:

Raises issue of a clause / chapter on handling metadata records for datasets in a series. Issue: depends on fileIdentifier, which is not officially a GEMINI element *Therefore leave for now* 

Sean & Tee will make a 'best effort' from the rest of the GEMINI changes 2.2 to 2.3 document, taking into account the notes which Rob provided in August 2015. They may raise questions to the group by email.

Action	All	Complete the Doodle poll for the next meeting: http://doodle.com/poll/egxkrimhh5fczkeb	done
Action	Sean	Attempt the changes required in the XML content	Transferred to Tee
Action	Tee	Attempt the changes required in the static pages, using Joomla front end editing	Partially done, using Admin interface

# 15 February 2017

Present: Peter, Tee, Les, Sean

Went through Peter's document of 'tidying up' that he had done, starting at the 'new

(temporary) home page': <a href="http://agi.dev.web-">http://agi.dev.web-</a>

<u>foundry.co.uk/component/content/article?id=1022</u> (drafted by Les). "Tidying" included some editorial corrections which strictly do change the content:

- Spatial data service type: fixed the 'example' in the guidelines so it no longer contradicts the description of the domain
- Coding rules for conformity of services, which said 'for datasets/series'
- Temporal extent: Amended the guidelines in the INSPIRE views now explicit that although GEMINI allows 'century', you can't encode it.
- Conformity: INSPIRE Requirements guidance: Added "Other conformity statements may be added, citing INSPIRE technical guidance or other specifications"
- Topic category: Removed from service metadata, as implied at two out of three places in GEMINI, because we had agreed that GEMINI Table 2 is incorrect on this
- Extent: Added an example from the encoding to the 'examples' section; I also added a GDS register example
- Unique resource identifier: Replaced the GIGateway example with one from the encoding section.
- Moving the encoding of spatial resolution from a comment in the abstract to explicitly in that element
- Fixed a number of external links from static articles 1005, 1010

Some grammatical fixes (e.g. singular/plural mismatch); quite a bit of de-duplicating (mainly because Guidance Part 2 was written to stand alone); some of that then resulted in tables being an inappropriate way to present what's left (for example, vertical extent); some improvements to the consistent use of sentence case; some internal tidying in the XML with no effect on what's seen.

Note: there is still duplication of intent; this has only fixed where the text itself was duplicated, or almost exactly the same.

This meeting reviewed the changes so far, and identified about a dozen more. Sean also has some further comments on the glossary and other pages. Once these are fixed, we can make the pages public, and then proceed to the actual GEMINI 2.3 work.

Sean & Tee offered to do pieces of work in order to get used to the system, and decide how much they will be able to take on.

Action - brought forward		Three actions from meeting of 23rd Jan	
Action	Sean	Send his comment about glossary & other pages to those on the call.	
Action	All	Respond to Sean's email before noon Friday 17th Feb	
Action	Peter	Friday afternoon, make the dozen changes noted, plus those from Sean's email, and send out call to everyone to look again. Write up notes on how to make future changes.	
Action	All	Final 'go live' decision, but noon Thursday 23rd Feb	
Action	Peter	On Thursday 23rd Feb, tell Web Foundry to make the pages live	
Action	All	Next meeting, 2pm Monday 27th, to identify	

pieces of agreed work for Sean & Tee to do.	
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## 23 January 2017

Present: Peter, James, Sean, Les, Tee & Claire Proposed agenda:

- 1. Actions from the last meeting
- 2. Report on progress to date:
  - a. Content received from HRW
  - b. Comments fed back to HRW and progress with these
- 3. Review of outstanding issues
- 4. Meeting of quality criteria set out at the start of the project:
  - a. Content accurate, complete and consistent not seen the whole package yet
  - b. Satisfies a range of use cases when published on the web
  - c. Content that can be published on the AGI website
  - d. Is user friendly
    - i. Navigable
    - ii. Searchable
  - e. Allows easy updating of the documentation
    - i. Editing and uploading of XML
    - ii. Joomla
- 5. Need for more rigorous/formal acceptance testing
- 6. Acceptance of deliverables?
- 7. Publication on the AGI website

#### Notes:

- 2. Aiming for end of January; good progress but we yet have to decide whether/what to accept. Peter & Les have a phone call booked for Thursday 26th. We've sent several hundred comments, which HR Wallingford have generally acted on a good relationship. Still work to do, e.g. tidying up the format/layout of tables, as well as HRW working through the comments.
- 3. 48 issues in the log (v4\_0\_20170121); Les highlighted a few.
  - 3: Content that 'metadata element name' appears as 'name'
  - 4: Filtering: HRW will provide a cost estimate for doing this
  - 7: we can accept the consolidated list of references/links as a deliverable
  - 8: done
  - 13: would be easy to do later
  - 14, 15: HRW are not expecting to support downloading & printing; Les would prefer to discourage people; ONS can see benefit
  - 16: change to "GEMINI id" will need us to tidy up the text that refers to "element number" elsewhere. Leave to 2.3.
  - 27-32 and 36-48 are for us to fix after acceptance.

#### 4. Acceptance

- a some of the inconsistency is there in the source documents! We're not happy with the <br/>br/> in the coding guidelines of various elements, but generally they've done a fairly commendable job.
- b real gains in usability bringing together the GEMINI & INSPIRE stuff. It's a lot easier now.

c - yes

- d i) yes; ii) indexed, rather than directly searchable. Note: we didn't specify much of what this meant in detail. ONS: perhaps add 'search'; Les: we've asked HRW to estimate what this might take, e.g. to apply "accordion" pattern.
- e i) we believe so; ii) should be
- 5. There is nothing more we can do Les checks the comment resolution.
- 6. The working group is generally happy. If HRW complete all the comments, then we'd be OK to pay.
- 7. Should we have a 'tidy up' time before putting "GEMINI 2.2 content in the new form" live? Yes: Peter can put in a couple of days effort, then ask the working group to sign off a telephone meeting.

AOB. Peter's proposed WP2: voluntary effort - we are content for AGI to charge Defra Peter's proposed WP3 (schematron): how to do? Peter raised discussion of rolling this into the EDINA editor changes - which led to discussion of that:

Discussion of UK Metadata Editor, maintained by Edina; possible funding by Defra for update. There's a questionnaire out, both OS & ONS are considering their response - whether they'd be in a position to fund its continued existence - both use it, and may well make some contribution. Looking at other options, e.g. the INSPIRE Portal editor. Response so far is that people are using it, would struggle to find an alternative, would have difficulty paying for it (mostly local authorities).

Peter's proposed WP4 (Guidelines 3): Les wrote, Rob has updated. Les not sure whether it's worth aggregating into the rest - or even whether it is being used. We should all take a look, and say whether they feel it is worth retaining & updating - and best/worst aspects. MEDIN had a 'hack day' including metadata quality checks. For now, keep an amount in what we say to Defra.

Action - brought forward	Peter	Provide proposed words for the issues below i.e. in the log at the end of this file	b/f
Action - brought forward	All (by late Jan)	To consider which of these should become changes to GEMINI, which should be UK INSPIRE profile only, and which may have no effect - and record individual proposals in the spreadsheet (ONS may have to do this offline; Peter would merge)	b/f - by end Jan.
Action	Peter	Arrange meeting for about 10th Feb to agree that the 'tidied' (but not 'changed') content can go live	http://doodle.com/pol l/5kp5gqv728q3t89d
Action	All	consider Guidelines part 3 (near end of <a href="http://www.agi.org.uk/agi-group/standards-committee/uk-gemini">http://www.agi.org.uk/agi-group/standards-committee/uk-gemini</a> ): is it worth retaining & updating? Which bits are most/least valuable?	

## 10 January 2017

## HR Wallingford web demonstration

Present: Les, Peter, James, Phil, Sean, Claire & Tee; Lesley

Claire & Tee unable to see the demo, as it requires accepting a self-signed SSL certificate, so they dropped out for the demo.

Lesley talked us through the XML file

Peter, James, and Phil are familiar with XML.

We asked Lesley to include the information from Common Metadata Errors, with those which are specific to one element mentioned as an additional field within that elements.

## Working group conference call

Present: Peter, Les, Tim Duffy, James, Phil, Tee & Claire

Claire says Tee also has XML skills. Peter briefly described the first session, for Tim, then Les took over. Tim introduced himself.

Feedback from IST/36:

- 1. no known "non-INSPIRE" uses; need (Peter) to chase MOD & MEDIN
- 2. Rob Walker suggested that, given it's the only encoding we have, we adopt it as \*the\* GEMINI encoding. Agreed.

Other actions: updated above.

Les: update on Work Package 1:

Still due by end of month; HR Wallingford should provide everything, for acceptance testing, by mid January. We have complete content for each element, and quite a lot of the narrative text ("static pages") - last Friday; nothing yet sourced from Common Metadata Errors.

Les has a consolidated issues log, and some comments on the static page. Timetable now looks tight. The approach to the static pages could be better; comments on static pages not sent back to HR Wallingford yet; mostly from ONS.

Most likely people will want to print out a selection of pages - need to see how that will work. Les will talk to HR Wallingford.

Some content & links is out of date - that's our responsibility - fix in Work Package 2. We then went through the issues log, and resolved many of them - including that some will be fixed in GEMINI 2.3. Les will update that issues log.

Action - brought forward	All	Email Les with availability for testing in second half of January	done
Action - brought forward	Peter	Provide proposed words for the issues below i.e. in the log at the end of this file	c/f
Action - brought forward	All (by late Jan)	To consider which of these should become changes to GEMINI, which should be UK INSPIRE profile only, and which may have no effect - and record individual proposals in the spreadsheet (ONS may have to do this offline; Peter would merge)	c/f - by end Jan.

Action	Les	Update the issues log for the HR Wallingford contract.	done
Action	Peter	Create a meeting towards the end of January to accept (or otherwise) what HR Wallingford have done.	done
Decisio n		Include Alternative Title as part of the INSPIRE profile	
Decisio n		Keep the element numbers, but call them "GEMINI element identifier" or some such. Make it very clear that they are not to do with the order elements appear in an instance.	
Decisio n		Fixes to GEMINI Table 2 for services: remove lineage, and unique resource identifier	
Decisio n		INSPIRE Data and Services Conformity - Requirements. This needs enhancing. "If any other value than [None] is selected from the Conformity element's list, then there will be at least one conformity statement required, and at least one of any additional conformity statements shall be required to cite the relevant INSPIRE implementing rules: COMMISSION REGULATION (EU) No 1089/2010 of 23 November 2010 implementing Directive 2007/2/EC of the European Parliament and of the Council as regards interoperability of spatial datasets and services."	
Decisio n		Include both a GEMINI & document version number in the XML, and make both visible to the user through the XSLT.  Version the XSLT, but don't make that visible to the user.	
Decisio n		Keep the old documents available, but don't maintain the content as a document from now on. The idea of consolidating is to reduce duplication.	
Action	Peter	Chase MOD & MEDIN about any use case for GEMINI that isn't intended to also comply with INSPIRE.	MOD profile is based on 19115, and doesn't use GEMINI. Sean still checking with MEDIN.

# 2016 and before, in 'oldest at top' order

# 4<sup>th</sup> March 2015

Action	Les	draft Terms of Reference	Complete

Decision		all parts of the resulting document set will contain 'generic' and 'INSPIRE specific' parts, but these need to be clearly distinguished	
Decision		publish the deliverables under CC-BY (Peter to confirm with AGI Council)	
Decision		split work into a) restructure (as per ISO 19115?) & technical changes, and b) reformat & web hosting (we are open to things other than the AGI site; this is not essential)	Revised
Decision		we'll call it GEMINI 3	Revised
Action	Peter P	put out AGI news item about GEMINI 3, based on Annex I, plus three other areas of change, and inviting comment (but not on the INSPIRE bits!)	Complete
Action	Peter P	revise Annex 2, members may comment, but this group is not responsible for that aspect	complete

## 11th March 2015

Decision		Accepted Terms of Reference, if a sentence is added about	
		working by consensus & referring to AGI Standards	
		Committee if that's not possible	
Decision		Based on information from James about progress in Europe,	
		we believe it is appropriate to continue.	
Decision		Add into the list of change requests that we consider whether	
		to reference 'the Eden schemas'	
Action	Peter P	Add bullet point about Eden schemas into Annex I of the plan	Complete
		document	
Action	Peter P	Add deadline for other GEMINI change requests, set at April	Complete
		17	
Action	Peter P	Chase Defra for their standard contract terms	pending
Decision		We need to ensure that the revised Schematron rules are	
		properly tested	
Action	Peter P	Add a separate deliverable in the Schematron part of Annex 3,	Complete
		requiring a test report and test data that was used. Also	
		include reference in this section to the UK Location	
		Schematron Error Description document.	
Decision		We need commercial terms & conditions around the work	
		that AGI will let	
Action	Peter P	Request terms & conditions from AGI, e.g. those used for their	complete
		recent web site re-hosting.	
Decision		The working group is happy to take advice from AGI Council	
		on which licence to use when publishing GEMINI 3.	

Information: James let us know that the European INSPIRE Metadata work has made '90%' of its technical decisions; a small number of things have been referred to MIG, which is meeting this week. The document will then go to JRC for formatting.

Information: Peter let us know that CEH has an online schematron processor that we could use for supplementary (public) testing of the revised schematron files.

## 20th March 2015

Welcomed Tee Parry of ONS; Claire Dawson of ONS may also be available for some meetings.

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Action	All	Promote the fact that we're preparing for GEMINI 3. See	
		http://www.agi.org.uk/uk-gemini/	
Decision		We will invite bids before we have a contract with Defra, in	
		order to provide the cost breakdown that Defra require –	
		assuming that is acceptable to AGI (reputational risk).	
Decision		Invitation to bid needs to manage expectations – we're not	
		obliged to accept any tender, and we're not liable for costs of preparing bids.	
Decision		We'll need to include the evaluation criteria	
Action	James	Provide some 'boiler plate' evaluation criteria that we can	Superseded
		adapt or adopt	?
Decision		We will evaluate each work package, separately, for technical	
		aspects, before considering price. (Although we may have a	
		preference for having fewer separate contractors).	
Decision		We'll put the restructuring & technical document changes in	
		one work package, to allow for more efficient delivery. We'll	
		review the deliverables for both things (structure & technical	
		changes) at the same time. Consequently, there will be three work packages.	
Action	Peter P	Produce a draft new structure section covering keywords (in	Complete
	(Les &	the context of identification), in order that we agree & can	
	Peter V	explain what we are trying to achieve. This should not contain	
	could	any technical changes to do with keywords.	
	help)	By: 27 <sup>th</sup> March	
Action	Peter P	Chase Rob Walker to complete outstanding changes to the	complete
		Metadata Guidelines documents, consequent from GEMINI	
		2.2	

Information: James let us know that the INSPIRE metadata group have sent a collated document to MIG-T. Work on the Spatial Data Services (SDS) section should be complete in two weeks. A document is expected to go out to Member States for decision soon, concerning the approach for metadata about quality of SDS.

Information: Peter let us know that the contract between Defra & AGI may not be in place until late April / early May, partly because Defra want a cost breakdown before beginning their procurement process.

## 14th April 2015

AGI Standards Committee accepted our TOR. They questioned our decision to call it 'GEMINI 3', suggesting that that indicates a more major technical change than we are making. They also tasked us with checking that the GEMINI 2.2 revisions to the three guidelines documents are correct, and publishing those.

Decision	We'll call it GEMINI 2.3. 'pure' GEMINI will be backward	
	compatible, although we'll need to highlight that the INSPIRE	
	part isn't: INSPIRE are introducing some new mandatory	
	elements (in certain circumstances).	

Action	Peter	Update the announcement on the AGI web page: GEMINI 2.3; why (including that the INSPIRE bit won't be backward	Complete
		compatible, but the timing of that isn't AGI); and giving an email address for people to contact us.	
Decision		We are happy for John Tate of Environment Agency to join us.	
Action	Peter	Respond to John Tate	Complete
Decision		Rather than going out to tender with a definite sample output of Work Package 1, we could go out with a 'request for proposals' to satisfy certain use cases & acceptance criteria.	
Action	Les	To list the use cases, for us to describe. This includes the 'maintenance' use case – for us to make future changes.	complete

## 24th April 2015

Clare & John were on leave.

James informed us that MIG WP8 will meet on 7<sup>th</sup> May. He hopes to get clarity on INSPIRE's approach to metadata for network services & spatial data services.

We discussed the 'request for proposals' that we are preparing.

Action	Les	Introduce use case & actor to distinguish INSPIRE schematron from GEMINI schematron. Introduce a use case for downloading the schematron files (for use in software development). To circulate by 1 <sup>st</sup> May	Complete
Action	Peter	Update Annex 3 of 'working group plan'. Include explicit references to all the input documents. Include distinction between GEMINI and INSPIRE profile. Describe deliverables: 'some information objects in a publication system that facilitates these use cases'. The proposals must include how the supplier would deliver. <i>To circulate by 1st May</i>	complete

The intention is that these form a 'release candidate' that could go out on the AGI website. Once this group agrees, we can get it reviewed by David Henderson (AGI Chair) and Abigail Page, who was involved in the AGI's website migration (there most recent similar procurement).

	,.		
Decision		We will allow data quality elements in GEMINI.	
		Note: this was not an easy consensus; my thanks to those who	
		put aside their preference.	
Action	Peter	Respond to Sellafield's request to add five quality elements, showing the ISO 19115 elements that we plan to add because INSPIRE wants them. We believe they satisfy four of Sellafield's five. The other is 'dataset_score (an overall dataset score)' which is not well enough defined – suggest they add that themselves.	pending
Action	All	Review MEDIN's requested changes, as circulated by Sean.	complete

# 8<sup>th</sup> May 2015

Clare & John were unavailable.

James updated us on activity within INSPIRE. The MIG Metadata working group has escalated a question to MIG-T, giving two options of how to handle metadata for SDS. They have their draft '99% done', whichever option MIG-T choose. JRC have put the question to

national contact points; in the UK this is John Dixon of DEFRA, requesting comments by 18<sup>th</sup> May; hopefully this will be a MIG-T decision. The metadata group will be meeting during the INSPIRE conference (week beginning 25<sup>th</sup> May), so it is reasonable to assume that the technical decisions will be made by then.

James asked this group to help him advise John how to vote/comment. The group accepted. James will be away, so Peter will consolidate our comments.

		,	
Action	James	Distribute the options document, and template for comments, to this group	Completed
Action	All	Comments to Peter by noon 15 <sup>th</sup> May	Completed
Action	Peter	Comments & advice to John Dixon by end 15 <sup>th</sup> May	completed
Decision		As we no longer have a time pressure to spend 'last year's' money, but would still like to publish a revised GEMINI sooner rather than later, we plan to work from the draft that MIG (working group or –T) will send to JRC. Presumed to be in early June.	
Action	Peter	Check with John Dixon that he is happy for us to share the draft with potential suppliers (effectively, publically) – will it need to be endorsed by MIG-T? Will there be any concern from JRC, who will be publishing the document an unknown time after they receive the draft?	Completed – Michael Lutz points out the drafts are public
Action	Peter	To inform the group which companies & individuals have expressed any interest in this work, for information.	completed
Decision		We prefer to exclude 'part 3' of the metadata guidance from this process. It has a separate audience; it would be more useful if it referred to the encoding as well as the logical GEMINI (e.g. referencing XPaths, as well as element names), and is therefore dependent on the completion of the rest of the work; we have no evidence of it actually being used.	
Action	Peter	Escalate this decision to AGI Standards Committee, as it is a change of scope.	No: on checking, it isn't a change of scope, just of plan
Action	All	Brought forward: comment on 'Request for proposals' – best now to comment on the copy that includes Les's comments (emailed out during the meeting)	completed
Action	Sean	Update MEDIN_feedback_GEMINI_changes_24apr15 in line with the discussion (discussion at least on items 1, 6, 8, 10) – for agreement at next meeting	completed
Decision		The revised guidelines documents which Les had circulated are fit for publication; 'part 2' is essential to work on GEMINI 2.3	
Action	Les	Thank Rob for his work revising these guidelines, and ask him to get them published on the AGI website, without any specific announcement.	completed

# 22nd May 2015

Clare was unavailable; I'd sent the meeting request to the wrong email address for John

James informed us that the INSPIRE metadata group will meet face to face next week, and should publish a firm draft revised Implementing Rule by then. The current draft is at <a href="https://ies-svn.jrc.ec.europa.eu/projects/metadata/wiki/DraftTGMetadata\_v02">https://ies-svn.jrc.ec.europa.eu/projects/metadata/wiki/DraftTGMetadata\_v02</a>, but James suggested holding off reading it for a couple of weeks. The INSPIRE MIG-T had voted unanimously for 'option 2' for expressing SDS metadata.

Peter has received some material from AGI on conducting this kind of procurement. He will discuss with them further who will do what in the procurement process.

Tee requested that any who attend the INSPIRE Conference next week provide notes to ONS. Out of this group, only Peter P will be there.

Action	James	Provide some 'boiler plate' evaluation criteria that we can	Complete
brought forward		adapt or adopt	
Action	Peter	Respond to Sellafield's request to add five quality elements,	Pending –
brought		showing the ISO 19115 elements that we plan to add because	see decision
forward		INSPIRE wants them. We believe they satisfy four of Sellafield's	below
		five. The other is 'dataset_score (an overall dataset score)'	
		which is not well enough defined – suggest they add that	
		themselves.	
Decision		We will rename GEMINI element 36 to 'Resource Identifier',	
		with the intention of reducing the confusion with the IETF's URI	
		(http://tools.ietf.org/html/rfc3986). GEMINI will still reference	
		the INSPIRE / ISO 19115:2003 term, Unique Resource Identifier.	
		(This name is used in this way in 19115-1:2014 normative	
		Annex F Discovery metadata)	
Decision		We will add a conditional parentIdentifier element for use as	
		described in ISO 19115:2013. This is used by MEDIN and CEH,	
		and we believe by Environment Agency. Adopting it in GEMINI	
		would enable us to encourage data.gov.uk to use it to allow	
		navigation of a hierarchy of metadata records.	
		OS use a different approach; this will not be included in GEMINI	
		– not to stop OS, as GEMINI allows additional 19115 elements	
		to be used.	
Decision		We will not reinstate Metadata Standard Name & Version,	
		which were present in GEMINI 1 and are optional parts of ISO	
		19115:2003's core. In practice, the way they are modelled does	
		not work – a single standard name & a single version, each of	
		which can be overloaded with profile information as well.	
		ISO 19115-1:2014 separates standard & profile, and allows	
		repeated values.	
Decision		Sellafield's request for 'dataset_score' – advise them to handle	
		this in their own way, perhaps using DQ_Conformance, with the	
		'explanation' giving the score, or conformance to specific	
		'scores' – depending on their structure & how the scoring could	
		be cited.	
Action	Peter V	Expand each of the four bullet points at 'Work package 2' of	Complete -
		GEMINI: 2015 revision: request for proposals, and add the	further
		agreed changes from MEDIN/Sean's document. Enough detail	work
		to scope the non-INSPIRE changes for suppliers to price.	required
		Note: need to avoid the impression that there are extensive	
		technical changes that will require re-work of software.	

Action	Peter P	Put this Actions log & other core documents (Request for	complete -
		proposals) on a collaboration platform such as Google docs	not
			accessible
			to all
Action	Peter P	Consolidate the request for proposals, use cases, 'non-INSPIRE	partially
		changes', with the AGI procurement wording, to provide a draft	done
		we could use to get quotations.	
Decision		We will conduct a public request, via the AGI website.	

## 5th June 2015

Clare & Les sent their apologies. John was able to join us.

James informed us that the INSPIRE Metadata group had agreed to defer clarifying the way to encode constraints/restrictions, licensing conditions to their Release B.

We agreed to carry forward the agenda item about agreeing our evaluation criteria to the next meeting.

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Action brought forward  Decision	Peter P	Respond to Sellafield's request to add five quality elements, showing the ISO 19115 elements that we plan to add because INSPIRE wants them. We believe they satisfy four of Sellafield's five. The other is 'dataset_score (an overall dataset score)' which is not well enough defined – suggest they add that themselves.  'non-INSPIRE changes' document, numbered sections:  1. DOI: Mention new name of GEMINI element 36 2. parentldentifier: add new element 3. Distributor: guidance wording to encourage the MD_Identification approach 4. HTTP URI: agreed 5. element 36: ensure equivalent INSPIRE element is clear 6. data format: agreed 7. metadata language: encourage 'cym' for Welsh records, which are not acceptable to INSPIRE 8. parentldentifier: note ISO 19115 corrigendum 9. controlled vocabs: drop data format example?	Complete (18 June)
Action	Pete V	Make further minor changes to the 'non-INSPIRE changes' document as per decisions recorded above.	complete
Action	Peter P	Make extensive revisions to Request for Proposals document, as discussed, starting from 'AGIGEMINIrevision+LRcomment'. For example, consistently call it a 'request for proposals' for fixed prices for two 'lots' of which the first has two 'work packages' with a check point in between.	complete
Decisio n		We will carry the risk that INSPIRE Release A is not published. If that does happen, we could try to renegotiate the price for the technical changes, as the amount of work would reduce (the standard terms include one on cancellation).	
Action	Peter P	Use a Doodle poll to establish the date & time of the next meeting.	complete

## 22nd June 2015

Present: Peter P, Les, Tee, John, Sean

Peter V sent his apologies. Phil Trembath of CEH will join the group, shadowing Peter until end of August, when Peter will retire.

Abigail Page joined us; Abi is a member of AGI Council & Exec, and will oversee the procurement process to provide due diligence and appropriate governance.

	in proces	ss to provide due diligence and appropriate governance.	Т
Decisio n		We will publish the non-INSPIRE change requests, retitled to 'Changes agreed by AGI (other than from INSPIRE)', and with sufficient context to allow it to stand alone or AGI website.	
Action	Peter P	In Peter V's absence, amend 'change requests' document to make it a standalone document. Circulate for (hopefully) approval this week, and publication by end of June	two further questions, discussed at next meeting.
Decisio n		We will split the RFP document into an initial part (current sections 1 & 2), which can be agreed by the working group & published on the website asking organisations to express their desire to bid, and a second part containing the Terms & Conditions, and evaluation criteria, which we will provide to those organisations who contact us. This will give us contact details of bidding organisations, allowing us to respond to queries transparently, sending answers to each query to each interested organisation (whilst preserving anonymity).	
Decisio n		We will include an indication of the budget / expected bids "in the region of £10000 to £15000" (excluding VAT)	
Decisio n		We will include the Use Case diagram as an Annex.	
Action	Peter P	Various amendments to the RFP for consistency & clarity. Split document as described above.	amended but not split
Action	Peter P	Check with AGI how to handle VAT in the bidding & evaluation	•
Action	Abi	Check a couple of legal / wording issues: specifically the wording of who manages the contract & who should be lead contact, and how to word clause 7.1 given that we are open to making staged payments.	
Decisio n		We will weight the evaluation criteria: 60:40 quality vs price Relevant skills & track record - each x3 Understanding the RfP - x2 Innovation x1.5 Schedule x1 This is because we are not under any external pressure to complete the work by a deadline	
Decisio n		Looking at our own availability over the summer period, we will reschedule to work to take place in September - November, rather than August - October	
Action	Peter P	Use Doodle to pick a next meeting date, perhaps 2nd or 7th July. Make sure to invite Phil Trembath.	done

Post meeting note: the INSPIRE 'Release A' metadata draft is available at <a href="https://ies-svn.jrc.ec.europa.eu/attachments/download/1166/TG\_MD\_IR\_and\_ISO\_MIWP8\_draft\_v.03.doc">https://ies-svn.jrc.ec.europa.eu/attachments/download/1166/TG\_MD\_IR\_and\_ISO\_MIWP8\_draft\_v.03.doc</a>

# 9th July 2015

Present: Peter, Les, Tee, John, Sean, Peter V (covering for Phil)

Decisio		We will encourage INSPIRE to accept legacy identifiers	
n		that are not URIs, e.g. doi, identifiers encoded using	
		RS_Identifier. In general, we believe INSPIRE should	
		explicitly allow other valid ISO 19119/19139 elements	
		beyond those they require.	
Decisio		Non-INSPIRE requirements: encourage expansion of	
n		acronyms in textual fields, to improve search results &	
		distinguish between otherwise similar records.	
Action	Peter	Update 'Changes' document with explicit text about	Done
	P	acronyms, and publish on the AGI website before 22nd	
		July	
Action	all	comment today on INSPIRE Release A draft 0.3, for	done
		Peter to send to UK INSPIRE next week.	
Decisio		revised timetable, allowing more time for Lot 1, work	
n		package 1, and allowing for Lot 2 to be tested after	
		Christmas.	
Action	Peter	Update RFP document as per discussion in meeting	Done
	P	(based on comments received from Les, John, James),	(although
		and split in two. Circulate the two documents to the group	part 2 was
		before 22nd July.	12 August)
Action	Les	revise Use Case diagram, removing the 'quality' actors &	done
		use cases, and send to Peter to include in the RFP.	
Action	Peter	arrange a face to face meeting (with dial in possible) in	Doodle
	Р	week beginning 21st September, to evaluate the bids.	poll sent
Decisio		Date of next meeting 21st August, 09:30	
n			

# 21 August 2015

Present: Peter, Les, Phil, Sean, John.

Apologies: Abi Page, taking this matter to AGI Exec Committee for approval to proceed Peter informed the group that Jason King of Defra has confirmed that Defra still have the money 'identifier', and are awaiting the costed proposal from AGI (which will include work beyond the current RPF).

Decisio n		Adjust dates in RFP because we'll be evaluating the bids on 25th August	
Action	Peter P	Make a few changes to the RFP & one to the 'details' document, as discussed in the meeting	Done during the meeting, on screen (except the dates: done just after)
Action	Peter P	Get a clearer version of the use case diagram into the document	Done

Note		Date of next meeting: bid evaluation on 25th September.	
Action	Peter P	Keep group updated with progress: posting the documents & opening the call, and as bids are received.	on going

# 8th September 2015

Present: Peter, Les, Sean, John, James, Tee, Rob Walker - to discuss comments he had

made

Apologies: Claire

Rob Walker had raised some comments on the 'summary of changes' that we had made public (see <a href="http://www.agi.org.uk/join-us/agi-groups/standards-committee/uk-gemini">http://www.agi.org.uk/join-us/agi-groups/standards-committee/uk-gemini</a>). Several working group members had suggested that we'd be better off discussing these on the phone, including Rob for clarification.

Decisio n		We need to make it clear that the scope of GEMINI is expanding to include elements that could be considered beyond 'discovery' (into 'evaluation' and 'use') - but without necessarily distinguishing which are which.  The resulting document content should make it clear which things are INSPIRE specific - ensure that the RFP emphasises this.	
Action	Peter P	update RFP 1.0a (to 1.0b) and distribute, with list of people interested to bid.	
Action	All	Review the RFP & technical changes doc (http://www.agi.org.uk/about/resources/categor y/81-gemini?download=129:gemini-changes-2-2-to-2-3) with a view to clarity.	
Action	All	Consider a fresh set of eyes to review the technical aspects for clarity. Send the document(s) on if those people haven't expressed an interest in bidding	

# 25th September 2015

Present: Peter, Les, Tee, Claire, James (phone), Phil (phone)

Apologies: Sean, John

n consolidation & restructuring (up till now, Lot 1 Work Pacakge 1). This will reduce the risk posed by continued change at INSPIRE ('Release A'), and also recognises better the different skills required for this work & the technical change work.
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		It recognises that we need to do more detailed work on how the technical changes from INSPIRE impact GEMINI. If we get a very easy to use system, we may be able to make the changes 'ourselves'.	
Decisio n		We need more than just a weekly report: ask for a couple of 'sprint demos' where we can steer the direction that the suppliers are taking.	
Decisio n		ask for a 'wire frame' / mock up, either as part of the proposal or as an early first deliverable.	
Decisio n		need to emphasise content maintenance use case, including 'ease of use'	
Action	Les	update use case diagram to (re-)introduce the editor user	Completed
Decisio n		After much discussion, we believe that the resulting content will generally be called GEMINI. It is important to be clear about 'which bit is which' in the user experience. As there isn't a precise enumeration of elements against terms like 'discovery', 'use', we agreed with calling the subsets 'GEMINI core' and 'GEMINI INSPIRE'.	
Decisio n		Preference is for read only users to describe their role (e.g. GEMINI core or GEMINI INSPIRE; with or without XML examples), and experience a different view of the content	
Decisio n		We are open to consortia bid, with a clear prime & clear information about the part other members would play.	
Decisio n		If the proposal is not to put the content in AGI's Joopla, we need it to include migrating the content & structure from the other system into Joopla at a later date - included in the cost	
Decisio n		If we can get the RFP out 1st October, bid deadline should be 21st October, acceptance dependent on getting agreement on funding, and everything else after that.	
Action	Peter	update the RFP document & re-circulate for quick comment. Need to get it to AGI early in the week to stand any chance of 1st October.	Completed; issued 7th October, with revised dates

Questions for later, now that this RFP is only for consolidation & re-structure. We will need to answer these before moving ahead with the technical changes.

	Do we need to keep the e-GMS references?	
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Action	James, Tee	James and/or Tee may have something that enumerates the GEMINI / INSPIRE distinctions.	James shared a URL; Tee has emailed a file.
Decisio n		We will need to detail each individual change before making the change. This may require a series of meetings.	
Action	James	EDINA online editor consolidated help could be a useful input (HTML pages, importing into RoboHelp) Action is to share these	
Decisio n		'logical' examples are currently in Guidance 2. UK XML examples are better than those in INSPIRE. We don't see (much) value in the INSPIRE ones. We will need some new (UK) examples for the new INSPIRE elements.	
Decisio n		acronyms: guidance applies to title, abstract, lineage (perhaps other wordy strings, like explanation of conformance result). 'First use' in each element. Adopt NERC wording.	

### 3rd November 2015

Present: Peter, James, John, Sean, Phil, Claire & Tee

Apologies: Les (scores provided by email), Abi

No working group members (or their employers) have any material relationship with either bidder. Sean declared that he regularly works with HR Wallingford, as part of MEDIN; one of his colleagues has written one of their endorsements. In a previous job, John had worked with Astun.

We had scored the two bids individually. We compared our scores and discussed points where we differed. We noted:

#### Astun:

- some members were unclear how much Astun understood about our requirement to restructure the content
- the individuals' CVs are thin on relevant expertise (metadata, document handling)
- didn't provide three endorsements, although they did provide three examples of work
- proposed GitHub and ReadTheDocs, but not clear what benefit that offers over using Joomla. It adds the possibility of public contribution, but do we want that? We would need an explanation of how we would control it.

#### HR Wallingford:

- vague on how: i.e. how 'Metadata Maestro principles' (e.g. tagging?) would be mapped to Joomla concepts / capabilities
- no evidence of Joomla experience in CVs or work examples
- what solution would they have suggested if we didn't mention Joomla?
- what changes will they request to the Ts&Cs?
- ask them to correct the 'M6' data in their programme

We noted that with only two bidders, the mathematical approach means a £3500 price difference outweighs the fact that most people preferred the Astun bid. We tested this sensitivity: for example, if we upped Astun's scores for experience (e.g. they just hadn't put metadata in the individual cvs), they would be 10% ahead technically, but still behind.

Action	Peter	Contact HR Wallingford asking for clarification on the issues listed above. We don't need to contact Astun until after we've considered HR Wallingford's answers.	
Decisio n		When it comes to the technical changes, the 'editor' (contracted to do the work) will need metadata knowledge (perhaps more importantly than Joomla or Github knowledge)	
Action	Peter	circulate a revised draft of the price breakdown that AGI will send to Defra	

## 11th October 2016

Participants: Peter Parslow (Chair), Les Rackham (WP1 Project Manager), Sean Gaffney (BODC), James Reid (EDINA), John Tate (HS2), Phil Trembath (CEH), Tee Parry & Claire Dawson (ONS)

The "work package 1" project with HR Wallingford is now underway, with Les Rackham

managing it.

Action	Les	Confirmed that content from UKLP XML encoding document to be included – LR to enquire of HR Wallingford	Confirmed
Action	Les	Checking of consolidated content by WG (I3/M4 on the Programme) – LR to request a longer period for feedback from HR Wallingford.	requested
Action	Les	Browser compatibility – LR to check with AGI and HR Wallingford on testing against different browsers.	HR will check on 'all standard boundaries'
Action	Les	Back-up and security – assumption is that Web Foundry will include this under their contract with AGI – LR to check with AGI.	Part of Web Foundry agreement
Action	Les	Access to AGI website – members, at least an editor, will require access to the GEMINI part of the AGI website for edits at the end of the project – LR to seek assurance from AGI that this will be possible.	This is expected
Action	Les	Accessibility – LR to check with AGI for conformance to any standard (e.g. Web Content Accessibility Guidelines (WCAG)).	Main website does follow these guidelines
Action	Les	Availability for providing feedback and acceptance testing – members of WG to	James, Peter, Sean, Phil have provided

		provide LR with their general availability up to Christmas.	availability
Action	Les	Test plan – LR to draft an initial test plan for comment by the WG.	Done
Action	Les, Peter	Future meetings – LR to propose possible future dates up until Christmas based on draft programme, PP to schedule meetings.	Done

#### 4th November 2016

Participants: Peter, Les, Claire, Tee, Phil, James

Apologies: John

Agenda:

Checked the actions above

- 1. Update the group on where we are on the plan risks and issues.
- 2. Look at the test plan discuss how we are actually going to run the tests and who will do it.
- 3. Get a first reaction to the aggregation of the content thus far
- 4. Gather any feedback
- 5. Consider where next

Getting behind the plan; problem has been getting the sand box set up on the AGI website (AGI council holiday; given Web Foundry the go ahead this week).

HR have sent some content for us to check (distributed two days ago). Need to remind them that we want different classes of user to have different experience. Need clearer indication of normative vs guidance. "Common Errors" is all (at present) "INSPIRE" content.

Les: should it be possible to extract UK GEMINI as a document in its own right? Benefit in allowing 'full text' extract, for offline use - but less sure about the need for it to be 'like' the current document.

Need to have the 'introductory' material, perhaps as listed in the test plan "content checklist". This should be reactive, like the elements.

Should we retain the e-GMS relation? Keep for now, although we may want to drop it. James: various comments: the effect of 'tables in tables'; it would be useful to support sorting on various things (alphabetic by element name, the order the elements appear in the XML,...)

Demo due on or around 18th; we have a meeting on 25th - suggest the demo is then.

Action	All	Comments on the content to Les	
Action	Les	Consolidate comments to feed back by the end of next week (11 Nov). He'll provide a draft for the group to add to.	

## 25 November 2016

Present (Skype call): Les, Sean, Phil, James, Peter

Apologies: Claire

- 1. Both actions from last meeting done.
- Getting behind plan mainly because of delays with HR Wallingford getting proper access to AGI website 'sandbox'. Last couple of weeks are problems getting XSLTs loaded on to the site. Therefore no demo to day. Les asking HR (this afternoon) if

they need to slip the mid December date.

This would have consequences for Work Package 2 & 3. Peter to check whether Abi Page is correct that this could be of concern to Defra.

3. Quick look at the new sample, which Les sent out this morning: four HTML files. From this, we can't see whether they have understood the idea of "one set of content, tagged to distinguish (four) use cases".

First thoughts: The INSPIRE view needs to include everything from GEMINI which isn't explicitly over-ridden by something in GEMINI.

4. HR need reminding that the generic content from the various GEMINI documents needs to be transferred, and the UK Location Operational Guide. Should we accept the XML encoding as the norm for GEMINI, rather than "just" UK Location.

Decision: adopt the UK Location encoding as the GEMINI encoding.

The encoding errors are more slanted to UK location / INSPIRE, having been documented as part of the data.gov.uk harvesting. Most are encoding errors. They should sit (generally) alongside the XML examples.

5. More thoughts on the HTML samples

Note: occasionally need to distinguish a data series record from a dataset record. A quick look indicates only two places (in the encoding) where these are different - and only different in the value which must be encoded (resource type, and quality scope). Perhaps handle this distinction within the guidance of the elements; Les to check HR's view.

We need a link, or a demo, as soon as possible.

Send comments to Les by email, for a meeting this afternoon.

6. Work package 2

We hope for a system that is so easy to edit that we can make the changes whilst sitting as a working group. If not, we may need to let a contract - in which case we need to make the changes more explicit, and also meet afterwards to confirm what that the changes have been implemented correctly.

New INSPIRE document should be out before Christmas, and makes the specific changes more clear. We'd need to analyse how many of the changes potentially impact on default GEMINI - e.g. extra optional attributes that INSPIRE defines. James will 'take a stab' at analysing the INSPIRE changes - which ones might we adopt into GEMINI? He'll aim to do that by the week after next - may be in time for the next meeting. If not, Peter to call an additional GEMINI Working Group meeting, including Rob Walker, preferably before Christmas - to report to January IST/36.

(The Skype group call works OK - most of us can share our screen (except James, on mobile)- only Les can't see it (except he could see Peter's!) & when Les shares, Sean can't see it! Couldn't dial out to Tee - but couldn't phone her number on a land line either.)

Action	Peter	Check if there are any contractual / payment consequences if work package 2 or 3 carries forward into next year.	
Action	Les	Take the initial comments above back to HR	done
Action	James	Send a link to the latest INSPIRE draft, and analyse which ones may impact INSPIRE.	done
Action	Peter	Send out the July 2015 GEMINI changes document, and link to this file	done
Action	All	Review the changes agreed before, and those listed below in this document, to confirm that we all agree they are well enough defined for us to understand.	

## 13 December 2016

Present (telephone conference call): Les, Sean, Phil, James, Peter Present: James, Les, Tee, Sean

Apologies: Phil, Claire, John (withdrawing from the group for now)

1. Update on Work Package 1 / HR Wallingford contract.

HR revised plan (version 5!) is to complete at end of January, with a final version delivered to us mid January. An improved version (greater functionality) should arrive this week. James & Peter had looked at the XML sample provided today; it satisfies the basic requirement of 'common content', but does imply that we will need XML skills to edit the element content in future. Not explicit whether it is a project-specific structure, whether there is a formal schema, whether stylesheets are applied on the fly. Need to check these with HR Wallingford, preferably by means of a demo & meeting.

Tee volunteered to look at the next test system even though she'll be on leave from Friday. 2.1 (Peter) Revisit "Changes to be included in GEMINI v2.3"

Item 9: MEDIN are moving away from SeaDataNet to use the NERC vocabulary server, so we should use the NERC vocabulary servers in the example best practice:

- P02 url for element 6, keyword: <a href="https://www.bodc.ac.uk/data/codes\_and\_formats/vocabulary\_search/P02/">https://www.bodc.ac.uk/data/codes\_and\_formats/vocabulary\_search/P02/</a>
- C64 url for element 15, extent: <a href="https://www.bodc.ac.uk/data/codes\_and\_formats/vocabulary\_search/C64/">https://www.bodc.ac.uk/data/codes\_and\_formats/vocabulary\_search/C64/</a>
- 2.2 (Peter) We checked the list at the end of this file we're comfortable that the decisions we've made remain valid. We need to provide specific words for some
- 2.3 (James) Talked through the summary of INSPIRE changes. There's a detailed list of 51. We need to add the mandatory elements to GEMINI. Should we add all the optional & conditional ones to GEMINI or not? James view: the optional ones remain simply part of the general way that we allow any extra elements from ISO (e.g browse graphic).

The conditional ones could be argued various ways!

(Les) Are there any people creating metadata records other than for INSPIRE? The two best known use cases (MEDIN and MOD) are based on INSPIRE. (James:) the new system allows us to maintain the distinct profiles fairly easily, so why not retain it. GEMINI should remain "the lossy version" of an INSPIRE record.

(Peter) also the elements that are required because ISO 19115 (or 19139) requires them; should they be "promoted" to GEMINI?

We'll stick to the principle that a data publisher need only create one record i.e. if I make an INSPIRE record, it is necessarily a GEMINI record. How does this apply to INSPIRE vs MEDIN? Is there actually a "I just want to create a GEMINI record?" use case? *Refer this to IST/36* 

Because of the "any other 19115 element" clause, it hardly matters in practice when creating a metadata instance.

If someone includes all the optional, theme specific, elements, they'll have a very full record - well beyond what is useful for discovery. Perhaps not adopt these into GEMINI; should they be adopted into the UK INSPIRE profile, or can that "just" say "for other elements, see the INSPIRE document?"

Those who commission tools will need to decide whether they want to populate the optional parts, and ensure that the tools support this. That's the same whether the description of how to do it is on the AGI site or the INSPIRE one. The question is how much should the new GEMINI+UK INSPIRE be a 'one stop shop', set against the extra material that would need to be maintained. Hold off on this until we have made our individual suggestions, consolidated them, and therefore have a 'size' for the issue.

Encoding: some EU Member States are pushing to move to the newer version of ISO 19115. This suggests holding off from adopting the encoding as GEMINI.

2.4 some discussion on future editing

We would prefer to have direct editorial access to Joomla. We need to know more clearly

what changes may require changes to the XSLT. We also need to check with AGI about

editing access; Les & Peter will talk to Abi about this tomorrow.

Action	Les	Arrange with HR Wallingford to demo & meet with us.	Partial success; done
Action	All	Email Les with availability for testing in second half of January	Les has had a reply from Peter; outstanding
Action	Peter	Arrange a meeting in early January to confirm test plans, and invite Rob Walker back into the group.	Doodle sent; done
Action	Peter	Provide proposed words for the issues below	pending
Action	Peter	Refer to IST/36:  1. is there a use case for "plain" GEMINI?  2. <b>Not</b> adopt the "UK location" encoding as the XML encoding of GEMINI i.e. leave it part of the UK INSPIRE profile	Done; See 10 Jan notes below for response
Action	Peter	Convert the list in James' document into a Google spreadsheet & share it	Done: https://docs.google.c om/spreadsheets/d/1 vJ_zsM3GA3SweS3 HrVPr6OidFm8MSZi 5PV7fNz2jtwE/edit#g id=75348326
Action	All (by late Jan)	To consider which of these should become changes to GEMINI, which should be UK INSPIRE profile only, and which may have no effect - and record individual proposals in the spreadsheet (ONS may have to do this offline; Peter would merge)	Some had looked. Peter needs to re- load his input. Carried forward.

# Issues / Questions

Most of the technical changes have been agreed in principle, and are documented at <a href="http://www.agi.org.uk/agi-group/standards-committee/uk-gemini">http://www.agi.org.uk/agi-group/standards-committee/uk-gemini</a> - "GEMINI Changes 2.2 to 2.3" (July 2015, Word document with Peter). We may need to consider, and will need to agree, exactly how these changes are made in the new content.

This is a log of other questions which have arisen since. We will need to answer these before moving ahead with the technical changes.

Source	Date	Question	Proposed answer
WG meeting	25 Septe mber 2015	Do we need to keep the e-GMS references?	4th November: Keep for now, although we may want to drop it. Decision on 7th April

			2017: drop it.
Rob's comme nts on the propose	Discus sed 8 Septe mber 2015	Citation details – This is not actually an element in GEMINI	True, and in the RFP summary we say that. Need to be more specific in the detailed document
d 2.3 change s		Parent identifier should refer to the metadata of the parent resource	Make this explicit
		INSPIRE new element "encoding" is the existing GEMINI 21 "data format"	Picked up in Work Package 3
		INSPIRE topological consistency: good to include an example	Picked up in Work Package 3
		Expansion of scope from "discovery"	We need to make it clear that the scope of GEMINI is expanding to include elements that could be considered beyond 'discovery' (into 'evaluation' and 'use') - but without necessarily distinguishing which are which.
		INSPIRE "maintenance information" relates to (replaces?) GEMINI "Frequency of update"	
		INSPIRE "supplemental information" relates to (replaces?) GEMINI "additional information source"	
		Note: the rest of Rob's document provides some useful clarification / comment on the proposed changes from INSPIRE (at that date)	
Email exchan ge: Peter, Angelo Quaglia (JRC), Jason King (UK)	July 2016	fileIdentifier:  - Emphasise that persistence & uniqueness are key  - ISO AP 1.0 recommends that it is a UUID  - If using a UUID, don't wrap it in curly brackets, because fileIdentifiers get used in CSW URL queries, and curly brackets are not allowed in URIs (RFC3986) (& aren't part of the UUID spec anyway)  - This may be in the updated EC guidance	See 'sprint 4': added text to guidelines/entryrules

Email exchan ge within WG	Septe mber 2015	Clearer guidance on the use of acronyms. Phil Trembath provided existing NERC text in an email on 16/09/2015.	Text updated in sprint 4
Issues log during HR Wallingf ord	Decem b 2016 - Januar y 2017	Whether to adopt the following elements into GEMINI, which are required (conditionally, in some cases) by the ISO standards, or by implementation: fileIdentfier, Hierarchy Level, Hierarchy Name and Quality Scope	Decision on 7th April 2017 to drop distinction between "INSPIRE" and "GEMINI"
contract		Similarly, remove language of a service, given that it is impossible to encode 'language' for a service when using ISO 19115/19119/19139	Sprint 4
		Encoding of time - GEMINI uses ISO 8601, ISO 19115 uses ISO 19108 TM_PRIMITIVE etc - clear guidance needed.	
		How will we version the content? This question has several parts:  - Policy, e.g. major/minor/"point", and what constitutes each level of change - How to implement that across one or more static pages, and the XML (& XSLT)	For the XML, we've adopted a version string, generally containing "number" (such as "2.3 beta") and date.
Les	17 Jan 2017	Does anyone use Metadata Guidelines Part 3? Is it worth updating & retaining it?	8th May 2015 we decided to exclude it 23 Jan 2017, actioned all to reconsider.
Peter	13 Feb 2017	Spotted whilst tidying the content:  Static page articles: why are the headings explicitly numbered, rather than using a numbered style (needs discussion with AGI/Web Foundry about css). Also, headings in most articles are explicitly 'strong', again without that being in the heading style  This requires discussion with AGI/Web Foundry about CSS styles	
Peter	13 Feb 2017	Spotted whilst tidying the content: Why are the paragraphs in 'encoding rules' numbered, whilst those from other source documents are not?	Agreed (15 Feb) that we should use un- numbered bullets unless the series is a procedure that needs to be done in order Done by HR

			Wallingford
Peter	13 Feb 2017	Spotted whilst tidying the content:  1. 'Dataset language' encoding for services: at present, there isn't one. Are we OK with this, or should we for now adopt the dataset encoding?  2. Should invalid examples be in the 'errors' section?  3. Do we accept the constraints that arise from the chosen encoding?  • Can't encode a temporal extent begin/end which is just a century  • Dataset language is mandatory  • Data format mandatory  • Data format mandatory  • Exact encoding of 'no limitations'  • Bounding box is implicitly WGS84  4. Temporal extent: INSPIRE entry rules differ a bit from the GEMINI ones, but probably mean the same  5. Frequency of update: the INSPIRE DMS bit is in the 'comments' – which would require the whole 'field' to be duplicated: see if we accept that comment as OK in GEMINI.  6. Coupled resource: Coupled resource content was an odd mix of 2.4.22 and Appendix F, but the 'by value' encoding is not allowed by INSPIRE. The sentence about operatesOn is true, as is the paragraph about >1 MD_Dataldentification, and the bit about CSW response; moved the 'by value' example (Example 2) to errors, and renumbered the examples. The errors are INSPIRE specific. I think this means Article 1018 (old Appendix F) is redundant.  7. Conformity: The 'comments' have come from the DMS Operational Guide, and are INSPIRE specific, but I left them (otherwise, would duplicate more), the two 'specific' sections were identical – merged them. Although they could be distinguished, as the obligation in GEMINI implies I'm not really sure where the text in guidleins / inspire_ comes from, but there's nothing that wrong with it. Notice that the word 'three' is missing from the encoding rules –	Vallingford  1. See above: not possible 2. Sprint 4: moved one Topic Category example 3. Assumed 'yes' at sprint 4 ('no limitations' is just a rule for the text; added WGS84 in 'rules')  4 & 5 have gone away by merging the content 6: leave to new EC TG
		but we're going to re-do that bit for 2.3 anyway. 8. Equivalent Scale: GEMINI guidelines say "this is purely to conform to INSPIRE, but DMS Operating Guide doesn't mention it – so HRW haven't made any INSPIRE_	

profile entry. Encoding guide only offers it for dataset/series. GEMINI Table 2 has it for services as well; Annex B indicates the conditions (with no mention of services) – the old INSPIRE TG has conditions for both dataset & service – but notes that it's not possible to express it for a service (should go in Abstract). This is unchanged in the new INSPIRE guidelines. The remaining 'guidelines' is rather at odds with the definition & what the INSPIRE guidelines say.

- 9. Spatial reference system: what are the INSPIRE service & dataset rules subtly different?
- 10. Could do more to consolidate "rules" & "guidelines", and Dataset language provides an example check with working group if they're happy for me to do that.
- 11. I believe the Vertical Extent encoding examples are wrong (in the source document) surely srv:extent can't be a child of gmd:MD\_DataIdentification?)
- 12. Resource locator guidelines contradict the examples in the encoding, which use this element for 'information' as well as 'download'. The DMS Guide for Additional Information Source says it shouldn't be used for links to on-line resources. Should 'information' Resource Locators all be in 'Additional Information Source' (ISO 19115 supplementalInformation)?
- 13. In most cases, we only have separate \_dt and \_sv encoding blocks to maintain because the examples include the MD\_DataIdentification/SV\_ServiceIdentification context I'm sure that could be handled more simply.
- 14. Frequency of update, services: Encoding Guidelines gives nothing for 'frequency of update' of services, although DMS Operational Guide treats it as for datasets. It's not an INSPIRE element, so this question should go to AIB. Same applies to 'Additional information source'.
- 15. Spatial data service type –Odd that the guidelines link out directly to the INSPIRE Guidelines document, which doesn't actually provide any more information than is in the GEMINI domain.
- 16. Resource type all four profiles are effectively the same, but worded slightly differently could tidy up more 17. Bounding Box: comment "In general,

9: no longer true in revised INSPIRE TG / work package 3 10: for work package 4?

- 11: no longer the case after work package 3
- 12. Fixed before/by work package 3

- 13. Fixed during work package 2 (changed the XSLT)
- 14. Neither can be done in 19119/19139 srv metadata, so removed them during work package 3
- 15.
- 16. Tidied in work package 2; too

		only single values should be used" – what does that mean!	much - separated the examples again during work package 3. 17.
Meeting	April 2017	Need process for allocating GEMINI ids to new elements	Work package 3: authorised James to create the next in sequence
Meeting (Rob)	April 2017	Need mechanism to indicate that an element is 'metadata on metadata' (as per section 6 of GEMINI 2.2 - metadata language, metadata date, metadata point of contact; plus parent identifier, file identifier)	ISO 19115 also considers hierarchyLevel & hierarchyLevelName to be part of the 'Metadata entity'; added an optional metadataOnMetadat a element, as a child of the 'element' element! & trial styling