BSI committee Geographic Information (IST/36) / AGI Standards Committee Business Plan 2019

Chairman

1. Scope

IST/36 is the committee of British Standards Institution (BSI) with responsibility for standards for geographic information. It also operates as the AGI's standing Standards Committee. Membership currently stands at 21, with representatives from a range of government and commercial organisations, as well as several individual members with special expertise in the development of standards, who are co-opted. A full list of members at the end of 2018 is given in Table A1 in Annex A; two members left this year, and two new people joined.

The Committee meets quarterly at BSI. These meetings are supplemented by telephone conferences held in the months between quarterly meetings.

Administrative support is provided by the Committees Support Centre (CSC) at BSI and AGI provide a Committee Secretary (sponsored by Ordnance Survey).

Committee members represent UK at the Technical Committee meetings of ISO/TC 211 (Geographic information/Geomatics). These meetings qualify for AITS[1] travel funding for members who are eligible. The schedule of meetings, as far as is known, for 2019 is given in Table A2 in Annex A.

The committee also maintains an active liaison to several other BSI committees, such as SDS/2 Smart and Sustainable Cities and Communities, and B/555 Construction design, modelling and data exchange; and also to the UK & Ireland forum of the Open Geospatial Consortium (OGC®).

2. Mission

The mission of the Committee is:

> *To enable the UK to have an agreed portfolio of relevant and trusted standards for the better exploitation and sharing of geographic information and that these are maintained and promoted.*

3. Terms of Reference

The terms of reference are to:

- understand and specify the stakeholder requirements, including through the Association for Geographic Information (AGI);
- engage with various professional and domain groups who could be using geographic information standards, such as surveying, cartography, computing, smart cities, construction.
- on behalf of BSI, propose and provide technical approval of British Standards;

---

[1] Assisted International Travel Scheme funded by the Department for Business, Energy and Industrial Strategy but administered by BSI

- monitor and prioritise the overall effort on UK standards;
- promote the value, understanding and adoption of national, European and International standards, through AGI;
- obtain funding for standards work and liaise with sponsors to ensure that the work of the Committee can be sustained;
- maintain a membership which is representative of the users, developers and producers of geographic information in UK;
- maintain a network of relevant UK domain and standard experts;
- coordinate UK input into the work of ISO/TC 211, CEN/TC 287 and other relevant *de jure* national, European and International Standards bodies;
- be responsible for the UK metadata guidance, UK GEMINI, and its associated guidance and implementation documents;
- agree the publication of ISO standards as British Standards where relevant and applicable to UK;
- maintain awareness of developments within the OGC where these will impact on the development of ISO standards.

3. Achievements during 2018

Support for ISO/TC 211

The UK provided active support through the following activities:

- UK experts led three ISO TC211 projects;
  - revision of ISO 19112 *Spatial referencing by geographic identifiers*,
  - revision of ISO 19111 (joint with OGC) *Referencing by coordinates,*
  - revision of ISO 19162 (joint with OGC) *Well known text representation of coordinate reference systems*
- attendance at meetings of Technical Committee, Working Groups, Project Teams, Editing Committees and coordinating groups including the Programme Management Group and the Advisory Group on Strategy (see Tables A3 and A4 in Annex A);
- input to a range of standards work items;
- national body response to formal ballots and request for comments on draft standards (see Table A5 in Annex A);
- liaison between ISO/TC 211 and the Oil and Gas Producers (OGP), and Energistics.

Support for CEN/TC 287

The UK provided the Chair and Secretariat of the TC - the Chair is a member of IST/36; secretariat is provided by BSI HQ staff. The remaining activity of the TC is to adopt ISO/TC 211 standards as CEN standards, via the Vienna Agreement.

British Standards

We have continued work on revision BS7666 *Spatial datasets for geographical referencing*.

UK GEMINI

A subgroup of the committee revised AGI's UK GEMINI. GEMINI 2.3 was published in June 2018, with editorial revisions published each month afterwards. The UK INSPIRE Discovery Service and location data on data.gov.uk still operate with GEMINI 2.2, but have announced their

intention to migrate by December 2019. UK GEMINI remains under the ownership of AGI who are responsible for its maintenance.

Other standards activity

The Committee maintains liaison with BSI's SDS/2 Smart and Sustainable Cities and Communities, and with B/555 Construction design, modelling and data exchange. The committee regularly coordinates input into relevant BSI Publicly Available Specifications.
The chair contributes to the central government Data Standards challenges, and has been involved with iStandUK, the English local authority data standards group.
The committee has been invited to MOD's Geospatial & Imagery Standards Steering Group, the chair of which is a member of IST/36.
The committee hosted an AGI event on 21st September, where representatives of ten UK geographic data publishers presented on the standards they use and issues which they have. This contributed to AGI's response to the Geospatial Commission's call for evidence, and can help us prioritise and hopefully increase engagement during 2019

4. Plan for 2019

Support for ISO/TC 211

The UK will continue to be active in ISO/TC 211. Much of the work will involve UK input to the revision of existing standards. In particular, UK will provide
- Leadership to the creation of ISO 19162 (joint with OGC)
- input to the direction of the work through the Programme Management Group, to try to ensure that there is a clear scope and business requirement for all new work items.
- Input to various joint working groups, as TC211 works more closely with domain communities (construction industry; intelligent transport)

Support for CEN/TC 287

The UK will continue to support CEN/TC 287 and continue to provide the Chair and Secretariat.

British Standards

We will finish revision of BS7666:2006, based on the consultation conducted previously.

UK GEMINI2

The GEMINI Working Group will continue to provide support including responding to queries via the AGI website. This may involve publishing clarifications and editorial updates, in support of wider adoption, and also involvement in European INSPIRE activities around metadata.

Liaison with other BSI work
- Active liaison with other BSI technical committees who should be using GI standards, such as BIM and Smart Cities
- Involvement in BSI projects, such as creating PASs

Other standards activities

Other standards activities will include the following:
- Support on standards for AGI, particularly the Special Interest Groups (SIGs) and events;
- The committee will work more closely with the OGC UK & Ireland forum

- Seek to understand barriers to the use of standards, and where possible, produce further material to improve adoption and use
- Will actively seek to work with the Geospatial Commission

5. Risks and mitigation

1. Isolation from AGI leadership, due to lack of communication, interest and support from Council:
   - Regular reports to AGI Chair and Council.
   - Establish good relationship with our AGI Council champion.
   - *This risk has reduced, in that AGI Council is taking more interest – we are regularly contributing to Council.*

2. Out of date information on the AGI website:
   - Improve the content and currency of the standards pages on the website, making use of our committee login that is still pending on the AGI website.
   - Place short news items with links to the standards pages.
3. Lack of representation at TC211 meetings, due to shortage of travel funding via AITS. Members increasingly report that AITS covers less than half the cost of attending meetings; this means that UK is often not able to send the most appropriate expert to a meeting – only if they have another source of funds
4. This would seriously diminish UK influence on European and International standards development, because of not being present in particular meetings, and being generally seen as less committed to TC211.
   - We will endeavour to always plan ahead such that AITS applications go in early and always before the quarter in which the meeting occurs.
   - Seek alternative funding where possible.
   - Seek sponsorship from potential beneficiaries of the work.

As a last resort, dial in to meetings where these facilities are available. Experience suggests that this is not effective.

5. Over-dependence on a few long-serving members:
   - We will continue our efforts to communicate the activities of IST/36 and the benefits of standards both to AGI, particularly through the SIGs, and the wider user community.
   - Seek to find new participants especially amongst those newer to the industry.
   - Follow up people whom we meet during outreach activities.
   - Ensure that nominating organisations are represented by people with interest, and senior support for their involvement.

6. Competing standards: Individual sectors which regard themselves as "special" and produce their own standards that are incompatible with industry, National or International Standards. At the national level, competing standards have already been produced.
   - We will encourage the use of existing standards through continuing promotion of the benefits.
   - We will attempt to minimise conflict by encouraging membership of IST/36 by other bodies and influencing through AGI and OGC.
   - We will establish a way to work with the Open Data Institute, who are becoming active in promoting data standards.

7. Failure by government to appreciate the importance of standards or even recognise their existence in the domain of geographic information.

- We will continue our efforts to communicate and involve government departments through encouragement of their participation in the work of IST/36, promotion of relevant standards, meetings with individual departments and personal contacts.
- We will continue to support UK INSPIRE where resources allow.
- Engage with the UK government Open Standards Board
- Engage with any Data Leaders Forum activity on SDIs

8. As a result of leaving the European Union, the UK government may repeal the INSPIRE Regulation, resulting in less requirement on public authorities to use our standards.
   - Play our part in advocating a national SDI

9. the Geospatial Commission, as it evolves and realises its mandate, may not engage with IST/36.
   - We will seek opportunities to present our work to the Geospatial Commission, and actively find a way to work together, as in the plan above.

Annex A.

Table A1: Membership of IST/36 – December 2017

Representing (Role)
AGI (Secretary) (Note: supported by Ordnance Survey)
British Cartographic Society
BCS, the Chartered Institute of IT
Building Smart UK (B/555 liaison)
Chair (Note: supported by Ordnance Survey)
EPL/278 liaison
IOT/1 liaison (Note: supported by Ordnance Survey)
Land and Property Services NI
Land Registry
Marine Environmental Data & Information Network (MEDIN)
MOD
ONS
OS, nominee to ISO 19152 (LADM) project
Satellite Applications Catapult
The Improvement Service
UK INSPIRE (Note: supported by EDINA)
GeoPlace
Individual capacity (geodesy)
Individual capacity (geographic information)
Individual capacity (imagery)
Individual capacity (metadata); chair CEN/TC 287

This table does not include an additional eight "non-participating" committee members who are members of particular working groups or ISO groups.

Table A2: Schedule for AITS funding
01 January 2019 – 31 December 2019

Committee Reference	Location	Dates of meeting	No of Delegates for AITS
ISO/TC 211	Slovenia	June 2019	3
ISO/TC 211	Japan	November 2019	3

Delegates will be confirmed nearer the dates of the meetings. CEN/TC287 does not meet.

Table A3: Participation in European and International Technical Committees in 2018

Technical Committee	Meetings		Role
	Location	**Dates**	
ISO/TC 211	Copenhagen (Denmark)	28 May-1 June	Head of UK Delegation Member of Delegation WG/PT delegates Remote participants
	Wuhan (China)	12 - 16 November	Head of UK Delegation Member of Delegation WG/PT delegate Remote participants:

Table A4: Participation in ISO/TC 211 working and *ad hoc* groups in 2018

Project or group	Title
ISO 19107	Spatial schema – revision project team
ISO 19111	Referencing by coordinates – revision project team – project lead
ISO 19112	Spatial referencing by geographic identifiers – revision project – project lead
ISO 19123-2	Schema for coverage geometry and functions
ISO 19127	Geodetic codes and parameters / Geodetic register
ISO 19131	Data product specification – revision
ISO 19139-1	Metadata – XML schema implementation – revision project team
ISO 19160-3	Address data quality
ISO 19161-1	Geodetic References: ITRS - project team
ISO 19162	CRS Well Known Text
ISO 19165-1	Preservation of digital data and metadata
ISO 19165-2	Preservation of digital data and metadata – Part 2 Content specification for earth observation data and derived digital products
ISO 19166	BIM to GIS conceptual mapping
	TC211/TC204 Joint Task Force on Intelligent Transport Systems
	TC59-SC13/TC211 joint working group on Geo-BIM
	Advisory Group on Strategy
AG 03	AG Programme Management Group
N/a	Control Body for Geodetic Registry Network *converted from 'adhoc' to formal advisory group*
AG 01	Advisory group on outreach

AG 07	AG Terminology maintenance
n/a	*Ad hoc* group to participate in a joint study group on sustainable development goals and targets (SDG) of the UN *Closed in summer meeting*
n/a	*Ad hoc* group on Location Based Services
n/a	*Ad hoc* group on classification issues
	Ad hoc group to revise the TC211 business plan
	Advisory group on supporting UN *new in late 2018*
	Ad hoc group on engagement *new in late 2018*

Table A5: UK Responses to International Ballots for Standards in 2018 as advised by IST/36

ISO Standard	Stage	Title	Vote	Result of vote in ISO
19111	DIS	Referencing by coordinates	Approve	Approved & sent for publication
19112	DIS	Spatial referencing by geographic identifiers	Approve	Approved; FDIS ballot initiated
19115-1	FDAM	Metadata – Part 1: Fundamentals: Amendment 1	No with comments	Approved; comment fixed; published
19115-2	FDIS	Metadata – Part 2: Extensions for acquisition and processing	Abstain	Approved; published
19123-2	FDIS	Schema for coverage geometry and functions – Part 2: Coverage implementation schema	Abstain	Approved with comments; published
19125-2	Withdrawal	Simple feature access – Part 2: SQL option	Yes i.e. withdraw	Agreed to withdraw
19136-1	DIS	Geography Markup Language (GML) - Part 1: Fundamentals	Yes with comments	*Vote closes 6th Nov*
19139-1	DTS	XML schema implementation – Part 1: Encoding rules	Approve with comments	Approved; comments resolved; sent for publication
19146	Skip FDIS	Cross-domain vocabularies	Approve	Approved; published
19150-2:2015/DAmd1	Amendment	Geographic information - Ontology - Part 2: Rules for developing ontologies in the Web Ontology Language (OWL) – Amendment 1	Yes, with comment	Approved with comments
19150-4	DIS	Ontology - Part 4: Service ontology		*Vote closes 27th December?*
19156	NWIP (revision)	Observations and measurements	Yes	Approved; project registered
19160-6	Draft NWIP		No comments	-
19160-6	NWIP	Addressing – Digital interchange models	Yes, with comments	Approved with comments

ISO Standard	Stage	Title	Vote	Result of vote in ISO
19161-1	CD	Geodetic references - Part 1: The international terrestrial reference system (ITRS)	Yes, with comments	Approved; revised draft submitted for DIS vote
19162	NWIP	Well-known text representation of coordinate reference systems	Yes	Approved; project registered
19163-2	NWIP	Content components and encoding rules for imagery and gridded data – Part 2: Implementation schema	Abstain	Approved; project registered
19166	CD	BIM to GIS conceptual mapping (B2GM)	No, with comments	Approved; but project will publish another candidate CD
19167	DTR	The application of "ubiquitous public access to geographic information" for an air quality information service	No, with comments	Approved; UK adoption / foreword under discussion
19168-1	NWIP	Web feature services – Part 1: Core	Yes, with comments	Yes
19165-1	FDIS	Preservation of digital data and metadata – Part 1LFundamentaks	Approve	Approved; published
23262	NWIP	GIS/ BIM interoperability *created joint working group*	Approve	Approved; project registered

Explanation of 'stage' acronyms:
NWIP: New Work Item Proposal, may have a draft attached, proposed for any stage
CD: committee draft (i.e. agreed at TC211)
DIS: draft international standard (for public vote managed by ISO)
FDIS: final draft international standard (optional stage, required if DIS attracts technical comment)

Review: periodically, ISO documents are reviewed: the choices are: confirm, amend (small changes), revise (initiates a full new process), withdraw
-      The table above does not include seven review ballots which occurred during the year.