

ACE/20 Unmanned Aircraft Systems

March 2018

Simon Merriman
Lead Programme Manager
British Standards



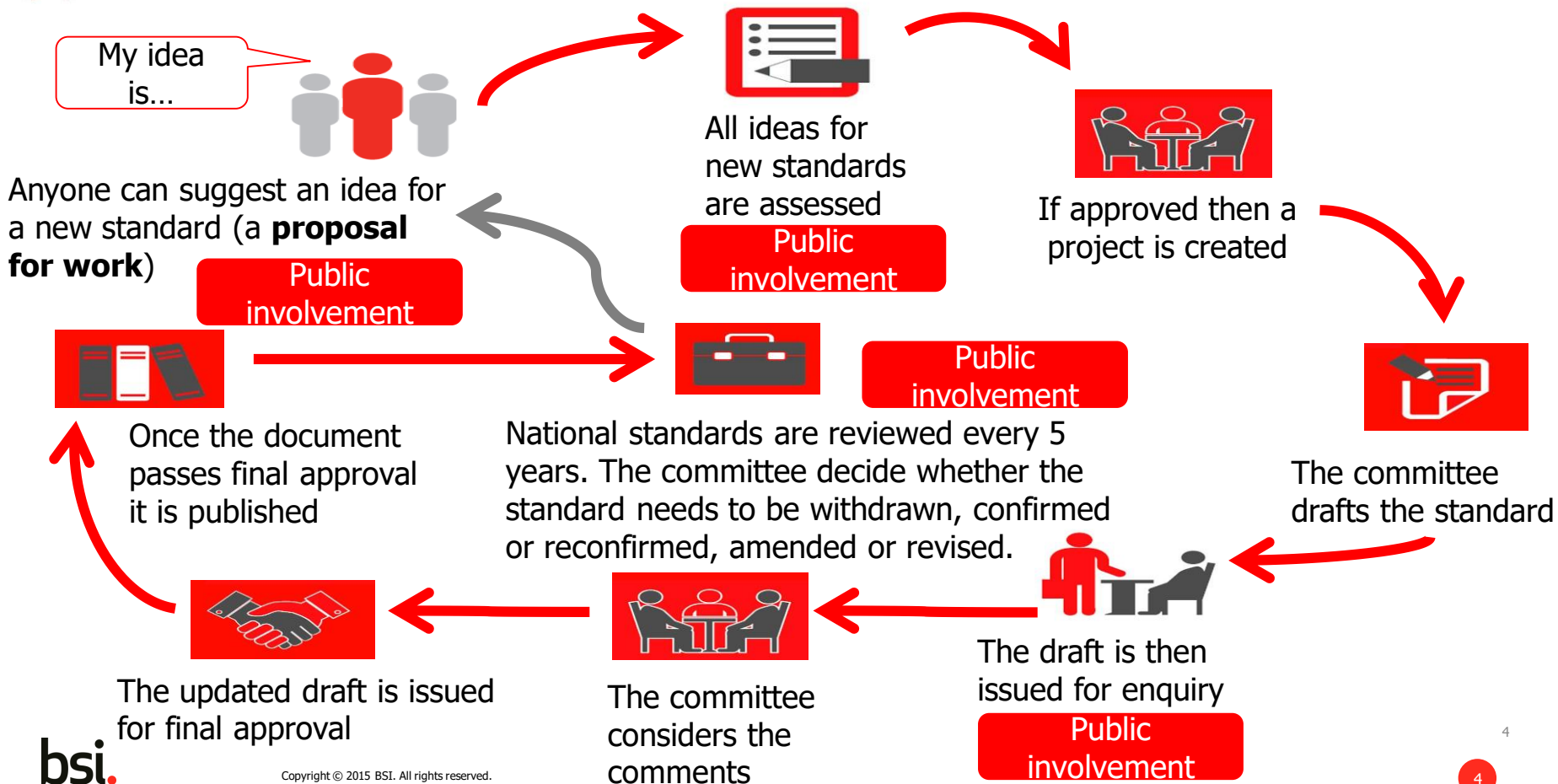
The National Standards Body

- Our role as the UK National Standards Body
 - BSI is recognized as the UK National Standards Body (NSB) by the UK Government. This status is formally codified in the Memorandum of Understanding (MoU) between the United Kingdom Government and the British Standards Institution in respect of its activities as the United Kingdom's National Standards Body.
- Delivering best practice knowledge
 - British Standards are knowledge. They're the distilled wisdom of experience and expertise, carefully assembled in a dependable format, tried and tested yet flexible and dynamic.
- **Standards create trust and form a common language!**

Types of standards

- Various types of standards:
 - PAS – Publically available specification.
 - BS – National Standard.
 - EN – Euronorm. Developed by CEN of which BSI is the UK member.
 - A requirement of CEN is that all EN's MUST be adopted unless there is national regulation preventing their adoption.
 - Harmonized standards as a result of a EU Directive i.e. CE Marking for Open Category UAS as a result of the EASA NPA
 - ISO – International standard
 - EN ISO – generally a European adoption of an international standard
 - TR – Technical Report – often used in emerging markets where there is a lack of consensus.

The Standards Making Process



National, European and international standards are developed using a transparent and consensus led approach.

National Standards Committee

- ACE/20 Unmanned Aircraft Systems
 - Responsible for the development of national standards for UAS and the UK input to ASD-STAN (Associated Body of CEN responsible for the development of EN standards for Aerospace) and ISO/TC 20/SC 16
- Currently close to 30 members
- A number of active liaisons with interested committees such as Emergency Vehicles, Autonomous Road Vehicles, Robotics etc.
- Recently completed the 'Roadmap for Standards'

National work programme

- BS XXX1 Qualification and approval of UAS operatives
 - Draft for Public Comment – June 2018
 - Publication – October 2018
- BS XXX2 Registration and identification
 - Draft for Public Comment – Q4 2018
 - Publication – End of Q1, 2019
- BVLOS
 - Scope under development and agreement
 - Likely to be accepted to work programme in next 2 months

European matters

- New D5 created for 'Autonomous Flying'.
 - Opportunity to set the scope of activities!
 - Opportunity to develop standards for EASA UAS Categories Specific and Certified?
- ASD-STAN D1/WG 4 UAS will be transferred to D5 once established
 - Focussed on responding to the requirements of the EASA NPA and CE Marking of Open Category
 - BNAE will be putting forward a number of work items at their next meeting
- Eurocae applied to CEN to become an Associated Body.
 - Application rejected
 - ASD-STAN seeking Eurocae to actively engage with the European Standards Body

International matters

- ISO/TC 20/SC 16 UAS
 - ISO/TC 20/SC 16/WG 1 General
 - ISO/TC 20/SC 16/WG 2 Product manufacturing and maintenance
 - ISO/TC 20/SC 16/WG 3 Operations and procedures
 - ISO/TC 20/SC 16/WG 4 UTM (?)
- Next meeting USA, June 2018
 - UK presenting the national standard for 'Qualification and approval of UAS operatives' and encouraging comment.
 - UK actively involved with all WG's
 - UK influential in the leadership of the committee

International work programme

- ISO/CD 21384-1 Unmanned aircraft systems -- Part 1: General specification
- ISO/AWI 21384-2 Unmanned aircraft systems -- Part 2: Product systems
- ISO/AWI 21384-3 Unmanned aircraft systems -- Part 3: Operational procedures
- ISO/AWI 21895 Categorization and classification of civil unmanned aircraft systems
- Work underway to develop an ISO Standards Roadmap

My thanks to the DIAG and its members.

Any questions?

bsi.

...making excellence a habit.™