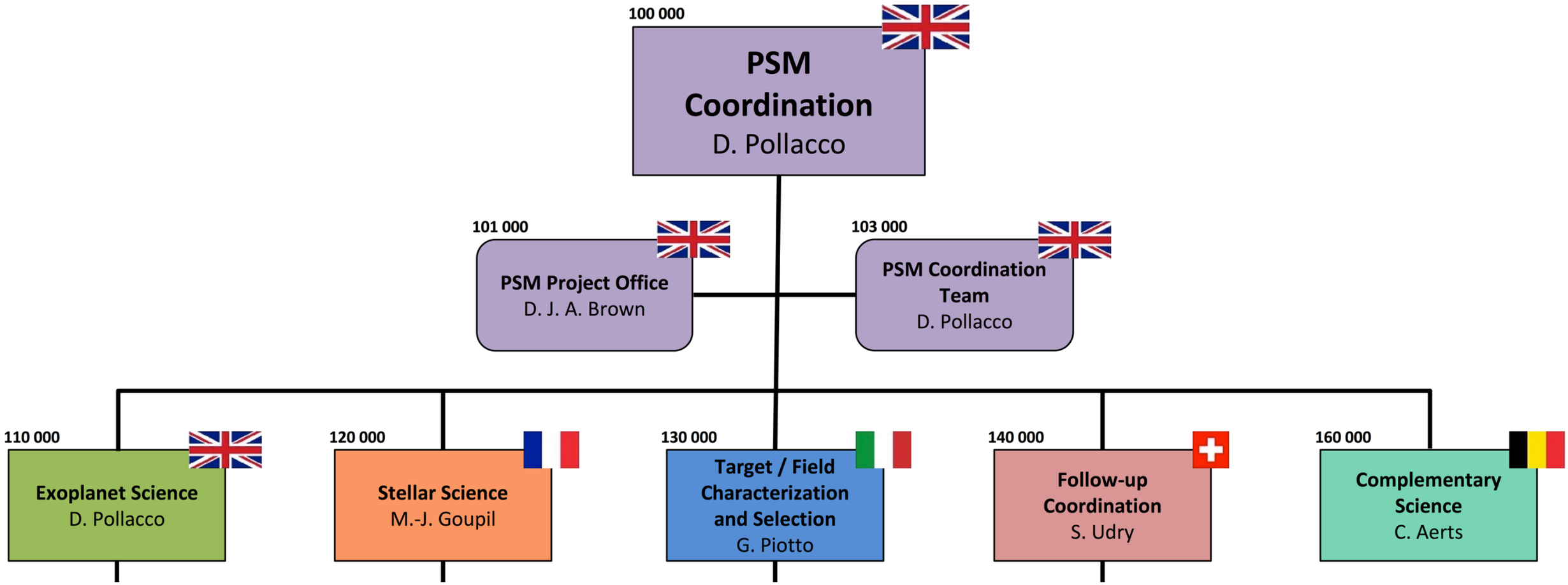
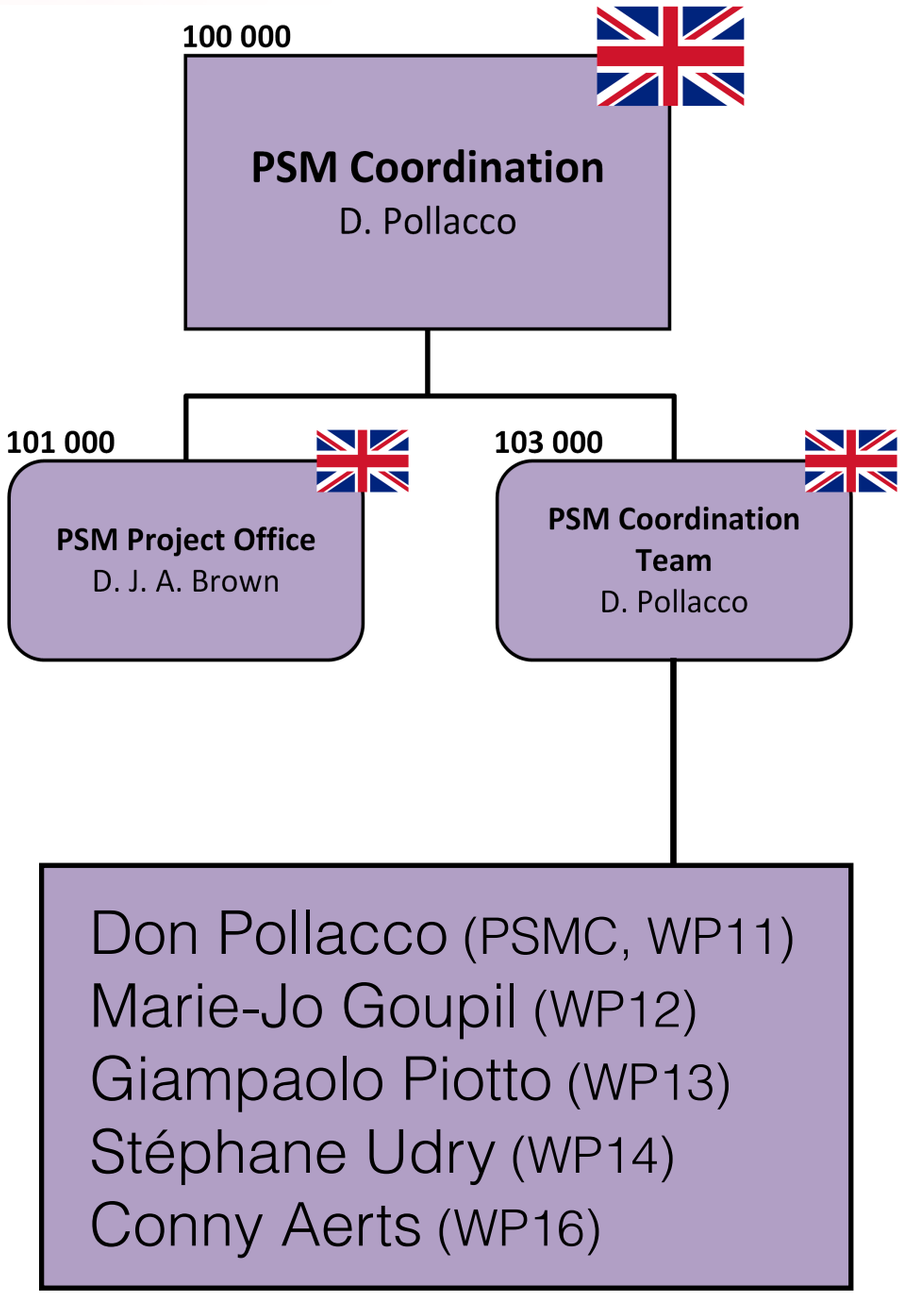
PSM Management

David Brown
(PSM Project Office)

Management Structure



Management Structure



- PSM Project Office
  - ➡ PSM interfaces
  - ➡ Configuration management
  - ➡ Organisation of scientific reviews
  - ➡ Admin
  - ➡ Website

- PSM-CT
  - ➡ PSM Coordinator
  - ➡ Project oversight
  - ➡ <Something about their power of sign-off>

Current Activities

- Regular meetings
- Documentation
- Scientific testing
- Development tools & configuration management
- Long-term effects for detrending

PSM-PDC Communications

- Policy that will describe procedures for:
  - ➡ Deliverables
  - ➡ High-level document preparation
  - ➡ Reviews of PDC algorithms

- Ongoing discussion providing lots of helpful feedback

- Working to:
  - ➡ Simplify and update procedures
  - ➡ Add separation between different procedures
  - ➡ Improve clarity

Science Testing

- Close-out of onboard algorithm testing
  - ➡ Test report
  - ➡ Investigation of odd data artefacts

- Changes to testing procedure
  - ➡ Statistical testing vs one-off testing
  - ➡ Definition of test cases in advance

On-Ground Algorithms

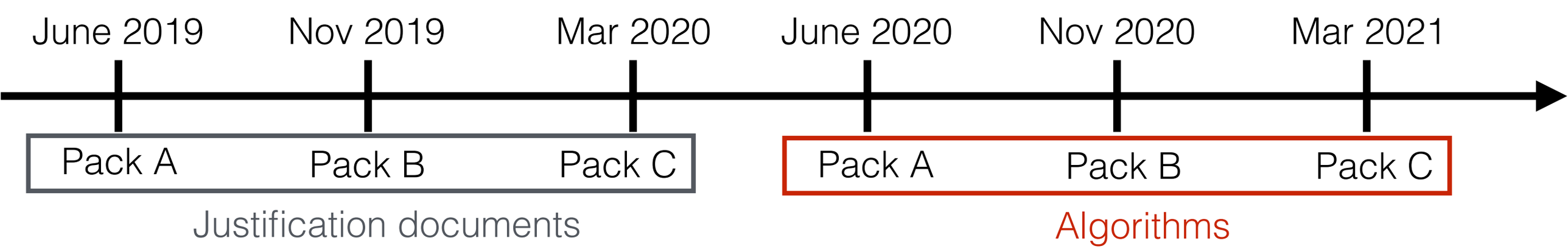
L0 / L1

PACK 0
Architecture and data flow of the on-ground science processing pipeline (document)

PACK A
Jitter and long-term drift correction
Microscanning and PSF modelling
Photometry of imagettes
Outlier correction
Photometry of saturated stars

PACK B
Attitude estimation
Calibration of image geometry
PSF interpolation across the field of view

PACK C
Sky-background modelling
Long-term detrending
Focus calibration
LC matching & flux calibration



Development and Configuration

- Documents
  - ➡ Collaborative writing
  - ➡ Identification and storage
  - ➡ Change control
- Action Items
- Requirements
  - ➡ Writing
  - ➡ Tracing
  - ➡ Fulfilment
- Software
  - ➡ Development
  - ➡ Issues
  - ➡ Testing
  - ➡ Version control

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One centralised system across the whole project is unachievable.

But we can have a **ground segment** system

Documents

- Collaborative writing:
  - ➡ Google docs? - has data protection issues
  - ➡ MS Office online?
  - ➡ OnlyOffice?

- ID / storage / change control:
  - ➡ MPSSR developed system?

- Likely to be short-term before transition to SOCCI.

Action Items

- Redmine: link
  - ➡ In use by the PDC for some time
  - ➡ PSM Office and top-level WPs have accounts

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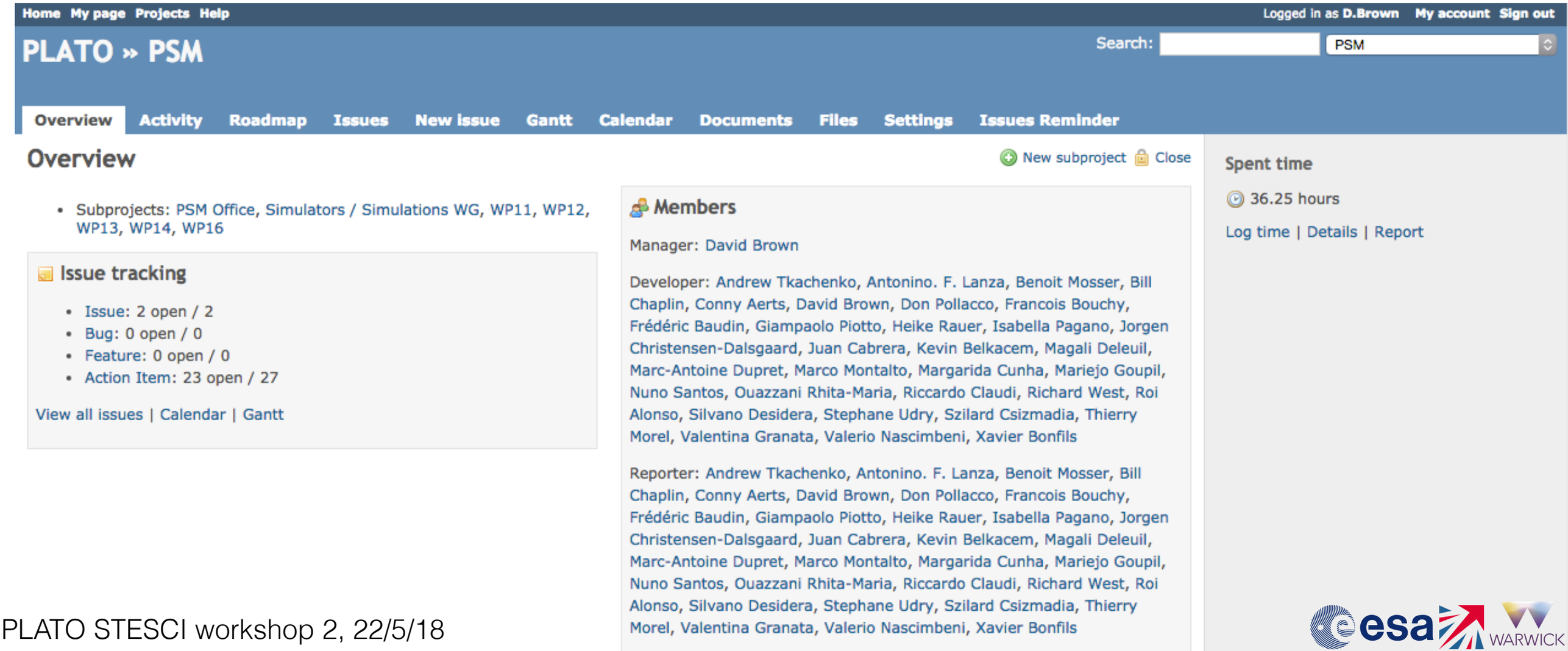

SOCCI

- ESA-developed environment
- Single login
- Includes:
  - ➡ Jira - action items; requirements
  - ➡ Confluence - document management
  - ➡ Bitbucket - code development
- Shared across SGS
- Roll-out over the coming months

Looking Forwards

2014	Mission selection
2015	
2016	
2017	Mission adoption Mission conference
2018	Selection of spacecraft manufacturer iPDR S/W SRR unit PDR
2019	Q1: S/W PDR **Q2: L0-L3 Requirements Review**
2020	**Q4: PGSRQDR**
2021	Critical Milestone Review (CMR)
2022	**Q4: Ground Segment Requirements Review (GSRqR)**
2023	**Q4: GS Design Review (GSDR)**
2024	**Q4: GS Implementation Review (GSIR)**
2025	**Q4: GS Readiness Review (GSRR)**
2026	**Q3: GS FOP Review** Q4: Operations Readiness Review (ORR) Q4: Launch
2030	End of nominal operations
2033	End of (possible) extended operations

Internal reviews
ESA reviews

L0-L3 Internal Review

- Objectives
  - ➡ Check that L0-L3 requirements are complete and fulfil mission requirements
  - ➡ Verify common understanding of goals and products
  - ➡ Allow for evolution of preliminary design
  - ➡ L0-L3 subsystem definition

Date	
June 2018	Kick-off for review preparations
December 2018	PLATO Week 7 — Face-to-face splinters
1st March 2019	Full set of drafts of all documents (100% complete)
30th July 2019	Delivery of document package; review kick-off
15th October 2019	Delivery of RIDS
15th November 2019	Review close-out

L0-L3 Internal Review

- Document package
  - ➡ Mix of ‘scientific’ and ‘management’ docs
  - ➡ ‘Scientific’ docs given priority

Document	**Lead author**
L2 URD & URJD	David Brown
L3 URD & URJD	David Brown
PMC SGS System User Requirements Specifications (SRS)	PDC Office PSM will receive requirements that need splitting
PMC SGS Science Implementation Plan (SIP) [L2/L3 parts; L0/L1 TBD]	PDC & PSM Offices plan respective contributions
PMC Management Plan	Anders Erikson [TBC]
PMC SGS Development Plan	PDC Office PSM will provide input on specific development details
PMC SGS Configuration Management Plan	David Brown

PLATO Week 7

- 5th - 7th December 2018
- Focus on PSM and PDC
- Splinters
  - ➡ Internal review
  - ➡ PIC
  - ➡ Candidate ranking
  - ➡ Ground-based data
  - ➡ Data processing
  - ➡ WP12?

Thank you

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