

Energy Theft Reduction Expert Group

29th March 2023

Welcome and Introductions

Aiyesha Andrade



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Purpose and Objectives

Jon Dixon

Terms of Reference

Roz Timperley

Terms of Reference

The Energy Theft Reduction Expert Group (ETREG) Terms of Reference were circulated with the meeting papers.

- The group shall:
  - Advise and feedback on the RECCo Theft Reduction Strategy and Initiatives
  - Advise on matters relating to the Energy Theft Tip-Off Service (ETTOS) and Theft Assessment Calculator
  - Advise on the development of Change Proposals regarding energy theft
  - Discuss operational issues relating to Theft Reduction matters and propose industrywide solutions
  - Provide input towards Category 3 operational products and guidance documents
  - Support initiatives to increase awareness of Energy Theft

- Group members shall act impartially and independently of the interests of their employer

- Members must declare any conflict of interest they or their employer may have in relation to any matter put
- to the group for determination.

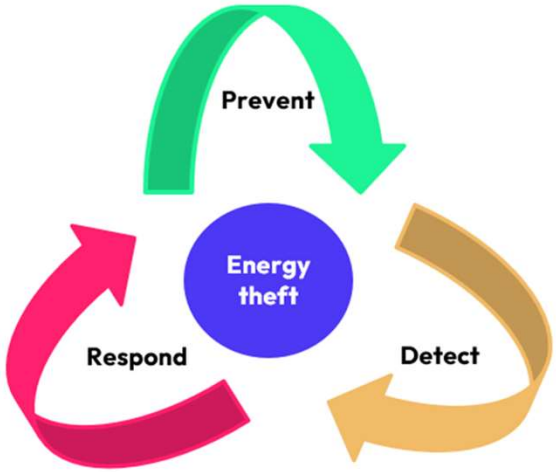
- Any member may nominate an alternate in the event they are unable to attend a meeting of the group

Group Members are invited to confirm that they will act in accordance with the Terms of Reference.

Update on Theft Reduction Strategy

Jon Dixon

Reminder: Theft Reduction Strategy and how we will deliver



Prevent - Activities to deter theft, through raising awareness of the risk of organised fraud, including scam services to avoid energy bills

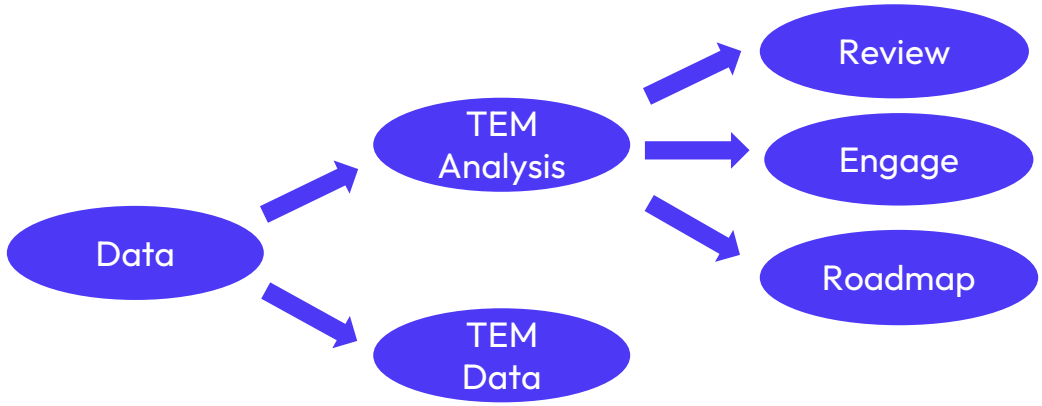
Detect - Better use of data and analytics will enable us to assess the scale of theft and other sources of soluble non-technical losses of energy to the system, as well as providing insights on where those losses are occurring and the effectiveness of mitigating measures

Respond - Enhancing the ability of industry parties to deal with individual cases of theft once detected and to gain insights for better prevention and detection

1. Re-establish **theft expert group** and stakeholder forum
1. **Raise awareness** of scale and impacts of energy theft
2. Develop theft **data hub and analytics**
3. Improve whole-of-system **incentives** to prevent, detect and investigate theft
4. Explore feasibility of **improving police focus** on energy theft

Catalyse Improvement | Consumers | Cost

We are delivering the TRS under an 'agile' methodology



THEME	EPIC	EPIC - DETAILS	FEATURES
Data	Analysis of Current Theft Estimation Methodology	**FOR:** REC Parties, RECCo, BEIS, Ofgem, Service Providers, Energy Suppliers **WHO:** Want to identify areas where the Theft Estimation Methodology can improved and assumptions can be reduced/limited **OUR:** Ambition for providing a reliable figure for the financial impact of Energy Theft to the industry **IS/ARE:** To evaluate the current Theft Estimation Methodology **THAT:** The improvements can be made by removing the assumptions that originally had to be made	No.1 - Review the Current Theft Estimation Methodology BENEFITS: Understanding of how the estimation was completed and the limitations (i.e.,where assumptions had to be made due to insufficient data/information) ACCEPTANCE CRITERIA: Identification of the assumptions made during the initial Theft Estimation Methodology
			No.2 - Engage with Industry and Wider Stakeholders BENEFITS: Obtain data/information to remove the assumptions and improve accuracy of the Theft Estimation Methodology ACCEPTANCE CRITERIA: Engage with industry and initiate the process of obtaining the required data
			No.3 - Development of Roadmap for the Theft Estimation Methodology BENEFITS: Clear vision on the steps that need to be taken to improve the Theft Estimation Methodology ACCEPTANCE CRITERIA: Creation of a roadmap which outlines key steps and targets for the ongoing development of the Theft Estimation Methodology

Current list of Theft Programme Epics	
Engagement and collaboration	Re-establish Dedicated Theft Expert Group
	Implement Energy Theft Stakeholder Forum
	Raising Safety Awareness of Energy Theft for Consumers
	Raising General Awareness of Energy Theft Across Industry
	Identify and engage with Non-Industry Agencies to Collaborate with on Energy Theft
Data	Engagement with Industry for Data Driven Services for Energy Theft
	Analysis of Current Theft Estimation Methodology
	Integration of Tampering Alert Alarms Data into Theft Estimation Methodology Model
	Integration of Low Voltage Network Data into Theft Estimation Methodology Model
	Develop Business Case for Energy Theft Detection System *(Dependancy on completion of 'Engagement' Phase)*
	Publish Business Case for Energy Theft Detection System *(Dependancy on completion of 'Develop' Phase)*
Empowerment and incentives	Implementation of Energy Theft Detection System
	Empowerment for Parties to Take Action on Energy Theft

Theft Target Methodology and Timetable

Jon Dixon

TDIS changes: R0091 and C3-040

Revisions to TDIS (REC Schedule 7) made in light of operation experience:

- Re-introduction of deadline
- Reference to two new documents
- Facilitate direct sharing of theft data into settlements (currently CDSP and DNs)
    - will review electricity route as part of work on MHHS

C3-040 introduced those documents as Category 3 – meaning that they are formally within the REC architecture but can be revised by the Code Manager without going through full change management:

- Theft Target Methodology
- TDIS Reporting Timeframe

We would expect future revisions to the Cat 3 documents to be discussed with ETREG – and possibly to make it the 'responsible committee' for signing off such changes from 1 April 2024.

2023/24 deadline

Table 1: The Reporting, Output and Query Deadlines for each Submission Period in the 2023/24 Scheme.

Submission Period	Party Submission Deadline	Submission for Confirmed Thefts with a Date Investigation Closed in this Month	Final Submission for Confirmed Thefts with a Date Investigation Closed in this Month	Code Manager Reporting Date	Party Query Deadline
1	01 June 2023	April 2023	N/A	20 June 2023	04 July 2023
2	03 July 2023	May 2023	April 2023	18 July 2023	01 August 2023
3	01 August 2023	June 2023	May 2023	22 August 2023	06 September 2023
4	01 September 2023	July 2023	June 2023	19 September 2023	03 October 2023
5	02 October 2023	August 2023	July 2023	24 October 2023	07 November 2023
6	01 November 2023	September 2023	August 2023	21 November 2023	05 December 2023
7	01 December 2023	October 2023	September 2023	19 December 2023	05 January 2024
8	03 January 2024	November 2023	October 2023	23 January 2024	06 February 2024
9	01 February 2024	December 2023	November 2023	20 February 2024	05 March 2024
10	01 March 2024	January 2024	December 2023	19 March 2024	04 April 2024
11	03 April 2024	February 2024	January 2024	23 April 2024	08 May 2024
12	02 May 2024	March 2024	February 2024	21 May 2024	05 June 2024
13	01 June 2024	N/A	March 2024	20 June 2024	18 July 2024

TDIS 2024/25

Jon Dixon

TDIS changes 2024/25

More radical changes to TDIS anticipated for 2024/25 – taking lessons from TEM Report and elsewhere

Possible changes:

- Split domestic incentive pots between credit and PPM, or legacy and smart;
- Split non-domestic between different EUC bands or profile classes (or business category);
- Reward investigations rather than only confirmed thefts;
- Extend rewards to GTs/DNs for investigations that would otherwise not have been carried out under RIIO incentives;
- Discrete incentive for leads generated by ETTOS;
- Change ratio of theft targets to reflect TEM results;
- Include other *outcomes* within TDIS (ensure incentives do not deter field agent from 'doing the right thing');
    - E.g. evidence of field agent adding consumer to PSR?

We will also review and build upon suggestions made in response to Stakeholder Survey (report to be added to Portal collaboration space)

These incremental changes/service enhancement will be taken forward as part of the Codes Roadmap (RPA led) – may be implemented via future change to Theft Target Methodology.

Wider (non-TDIS) incentives to be considered by RECCo (as currently no REC provision to build upon) – see earlier 'Epic'

We would welcome ETREG members views on where else we could improve TDIS.

TEM Recommendations

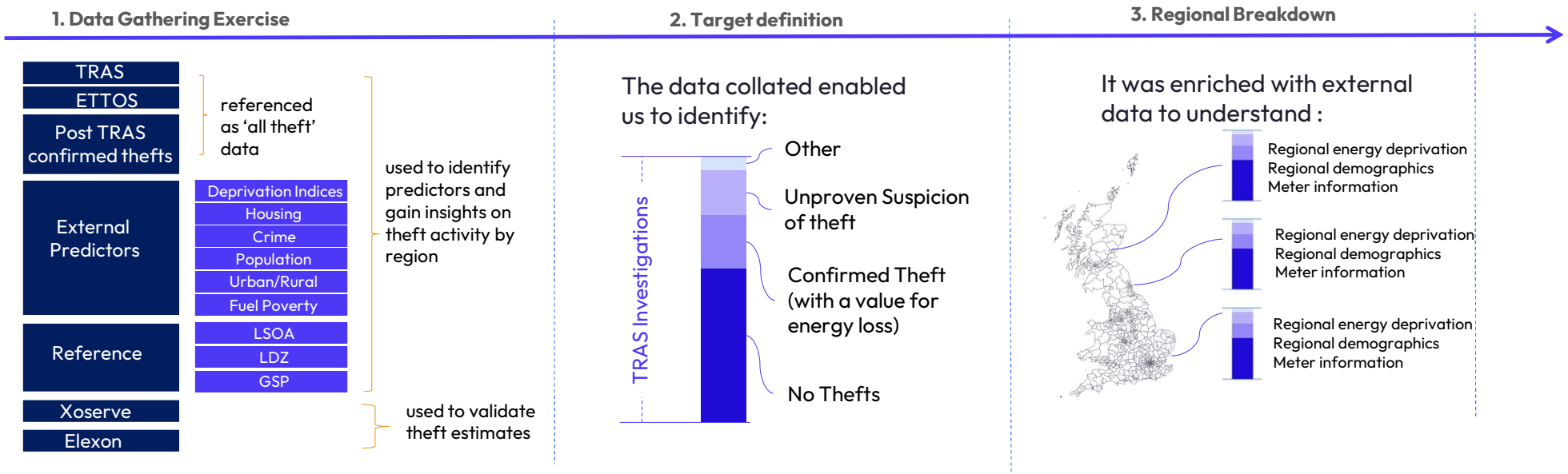
Roz Timperley

The TEM

The Theft Estimation Methodology (TEM) was published in January and estimates GB Energy Theft to be:

- Gas: 636 GWh to 1059 GWh (**£93m - £155m**) per year
- Electricity: 1703 GWh to 2837 GWh (**£737m - £1233m**) per year

The methodology was delivered over six steps



The TEM

4. Defining Reliable Regions

Regions can be classified into two categories as shown below:

Reliable regions



- Realistic proportion of confirmed theft investigations
- Consistency across suppliers
- Contain mix of urban/rural geographies
- Have few 'Under Investigation' cases

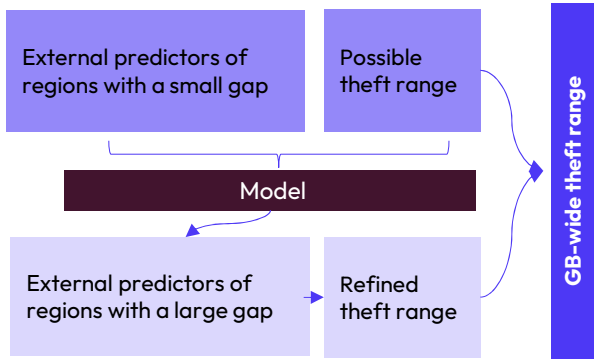
Regions to refine



- Unaccounted for energy gap is a large percentage of total energy balance
- ETTOS reports and investigations are not close in volume

5. Predictive Modelling

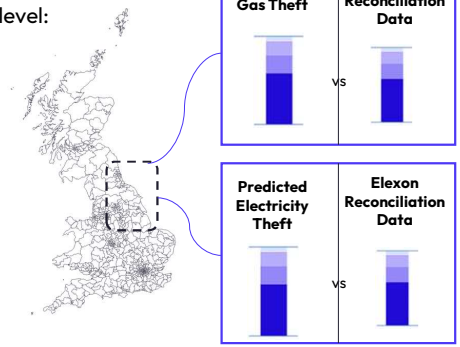
Predictors from reliable regions can be used to train the model



6. Validation Assurance

The predicted volume of losses can be aggregated at GSP/LDZ level and compared with published data from Xoserve and Elexon

Aggregate predicted assessed losses to GSP/LDZ level:



TEM Recommendations

Current Status

The data collected has been stored in a purpose built Azure environment. To enable a future re-run with updated data, code has been created within the environment for the ingestion of updated data and to run the calculations again.

In addition, the data is connected to a Power BI interface which RECCo can access to gain further insight into the theft data.

Recommendations

The TEM report recommended that RECCo explore the opportunity to add additional data sources ahead of any future TEM calculations, to enable the methodology to be enhanced.

The specific potential data sources identified were:

- Smart alerts
- Half-Hourly (HH) smart meter data
- Feeder Meter Data
- Hygiene rankings for food businesses
- Business classifications from Companies House

Group Members are invited to comment on the TEM and its recommendations

Update on Theft Portal

Jon Dixon

Energy Theft Portal Requirements

recco

- A central portal with secure access centrally maintained for all REC Parties
- 2-way portal use:
  - REC Parties providing relevant information into Energy Theft and associated investigations
  - REC Parties receive data insight based on information shared from other REC Parties
- Consistent data submission facilities:
  - Bulk upload by file transfer
  - Individual record input
  - Data quality enforcement and validation
  - Potential for future ambition of 'live' reporting mechanism for investigations rather than monthly submissions
- Create actionable insights, dashboard and reporting suites:
  - Data insight and trend analysis
  - Targeted and actionable heatmapping
  - Repeat offending alerts
  - Health & Safety alerts
  - Interface capability to support any future engagement with Police and central prosecutions.
  - Enables a clear evidence log repository

A phased approach to increase functionality and data overtime – potential phases

Phase 1
- Theft trends, bespoke dashboards and heat mapping generated from current TDIS submission (MVP)

Phase 2
- Additional data requirements to support centralised prosecutions for targeted energy theft cases

Phase 3
- Additional dashboards developed as required by Industry when agreement is secured for additional data provisions

Phase 4
- Alerts and lead generation following introduction of data from other public bodies

Phase 5+
- Continued exploration of data

Mason Advisory Market Scan & Recommendations



Product Market Scan Assessment Criteria

- Total cost of ownership
- Flexibility & usability
- Capability and functionality
- Vendor stability & strategy
- Market presence & case studies
- Demo & references



Partner Market Scan Assessment Criteria

- Solution Design
- Commercial
- Service delivery
- Track record
- Partnership approach
- Terms & conditions



Market Scan Approach

- Super-Long-List Identification
- Long-List Identification
- Detailed market scan
- Comparative assessment
- RECCo Value Assessment
- Lead Products for Consideration



Recommendations

- Project Initiation Document & Business Case development
- User Journey definitions
- Technical specification
- Tactical data analysis of existing data
- Pre-qualification questionnaire sent to lead product providers
- Procurement & Contracting Strategies
- Decision point



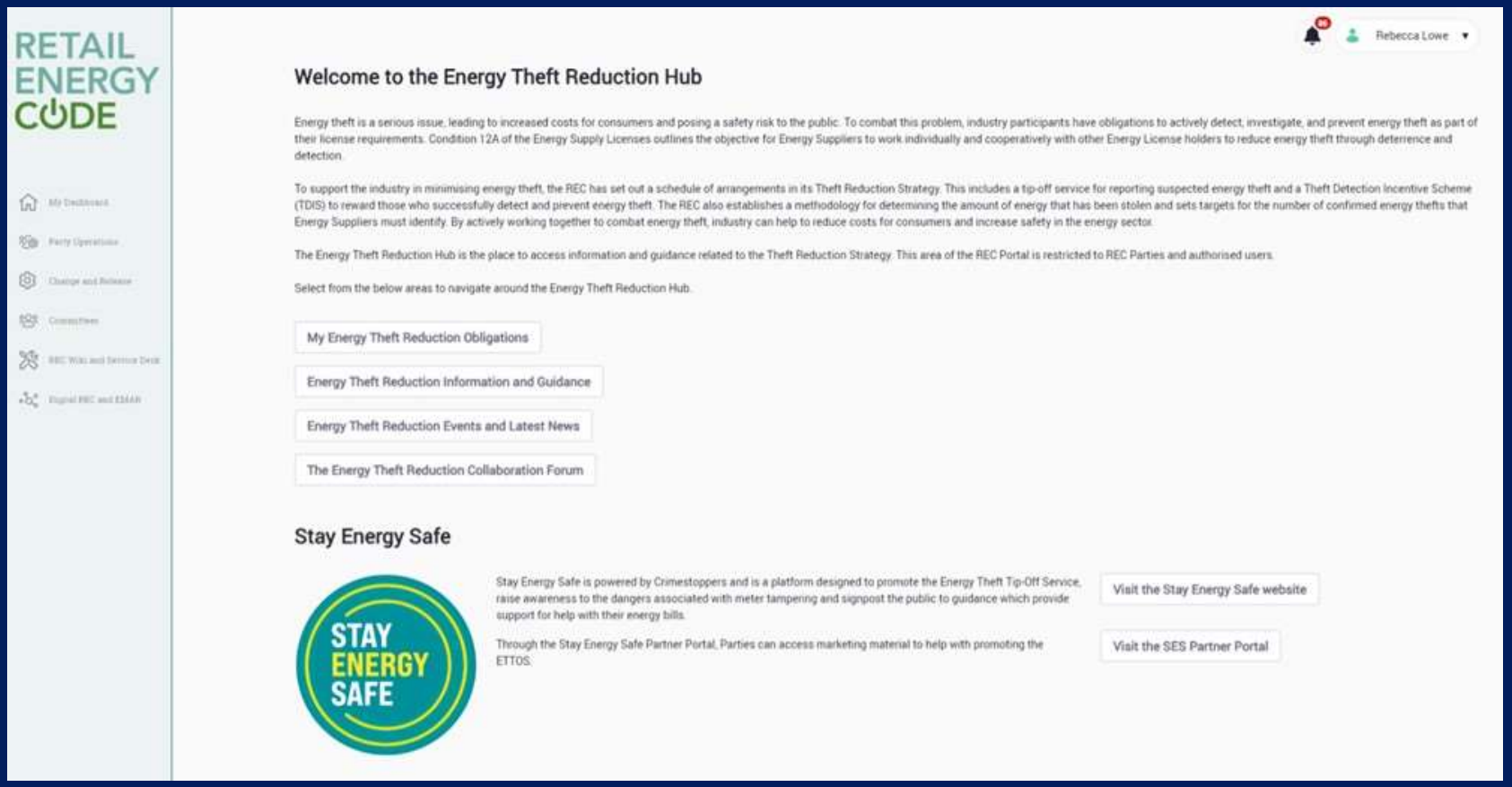
Current progress

- RECCo currently at the stage of developing the Project Brief and Business Case for approval

Energy Theft Reduction Hub

Aiyesha Andrade

Energy Theft Reduction Hub Homepage on the REC Portal





ASE actions log

Tracy Hardy

ASE Action Log - Delivery

ASE – 44 Key Actions Recorded

RECCo Initiated – Energy Theft Reduction Programme

Workstreams

- Industry Collaboration
- Awareness
- Data
- Incentive Schemes
- Enforcement
- Stakeholder Engagement

- Programme kicked off on the 3rd March 2023
- Each workstream will include a number of projects & change proposals to enable the actions to be completed
- ETREG to act as an external steering committee for Programme

Theft Stakeholder Forum (June)

Jon Dixon

Stakeholder Forum – pencilled in for 28 June

Unofficial checkpoint on progress since ASE:

- Update on projects and actions

Open invitation:

- proactive contact with ASE attendees, FWP and budget attendees, theft contacts and others who have expressed an interest (including potential service providers)

We would welcome suggestions – and presentations - from TREG members

Forward agenda

All

We will populate agenda when milestones of Epic delivery are known

26 April

Outline proposal for TDIS 2024/25

- Update on Theft Portal – next steps
- TEM revision – outline plan
- Update on discussion with police
- Confirm agenda for Theft Forum

May

- Confirm speakers and topics for Theft Forum
- Confirm invitation list for Theft Forum
- Update on TDIS 2024/25, inc' timetable for REC CP
- Review police unit Draft Target

28 June – Theft Stakeholder Forum

- Actions tracker and progress since ASE
- High level proposals for 2024/25 TDIS
- Review Actions

July

- Feedback from Forum

August

- TBC

September

- Review draft CP: 20
- 24/25 TDIS proposal
- Review draft CP: making TREG a REC committee

We welcome suggestions for further forward agenda items

AOB