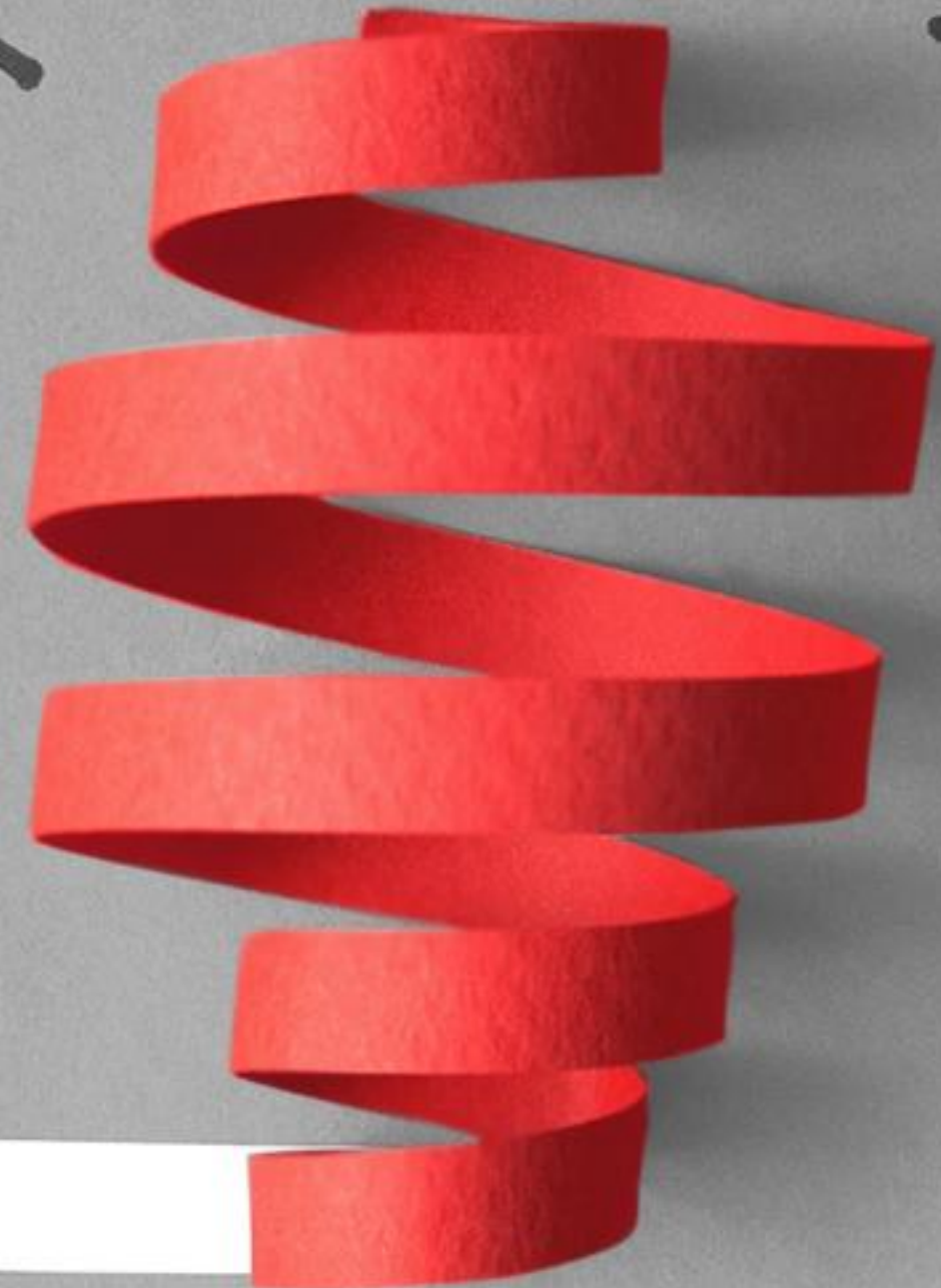# purco

PURCHASING CONSORTIUM SOUTHERN AFRICA NPC

ISO 9001:2015 certified company

Managing supply chain governance, ICT and legal risks through the PURCO SA e-Tendering platform

PURCOSA.CO.ZA

Background & Deliverables:
For staff and Members

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Back-ground

Pre-COVID
- PURCO SA had an effective tender publication & online purchase system for physical bid submission.

COVID - urgent need to facilitate non-physical bid submission
Built a simple zip-file webform system integrated with the existing website, payment and tender system.
- Considered alternate approaches: Email, Wetransfer, Dropbox, FTP uploads etc.
- All have same fundamental problems:
  - No integration with existing systems
  - Poor manual deadline control
  - Limited or no access control for bids and data (bidders, staff, bid committees)
  - No security of data / chain of custody
  - Enormous workload
    - managing and consolidating emails, submissions, downloads, queries…
    - data capture and reporting (invitations, info session attendees, purchasers, submissions)

Post COVID:
March 2022:   New website, CRM and integrated eTender system launched (file uploads only)
April 2023:   New system with Multi-component/ multi-phase/ multi-data-type functionality; and improved reporting
Ongoing: System enhancements are rolled out regularly

Key objectives for:

MEMBERS PURCO SA

Save time, cost and workload

- Remove duplicated effort (capture-once approach, by bidders not staff)
- Remove hassle associated with hard copy bid management:
  - e.g. payment and cash management, tenderbox management & receipting, submission control, data and document retention, **data capture**, and security.
- Automate reports and outputs.
- Automated reminders and follow-up (Contract expiries, B-BBEE and Tax certificates)
- Improved system security
- Strict access control by user, user role and time
- No extra costs for Members

Consolidated system

- Avoid silos of information or information distributed across separate repositories (including personal computers, shared drives, CRM systems etc.)

Access contracts and supplier records

- Enable Members with appropriate permissions to access contract documentation, bids, supplier records etc.

Key outcomes achieved

Stringent Governance and Security

- Compliant with POPIA and procurement regulations
- Strict access control
- Automation (deadlines, visibility, invitations, reporting etc.)
- Bid and data security (no lost records)
- Auditable - detailed logging and reporting

Secure System and Backups

- Secure servers: Live and replication servers hosted locally with different hosting providers and separate data centres. System intrusion protection at hosting providers, server and local site levels.
- Backups: Retain 14 daily, 3 weekly, and 4 monthly backups

Disaster recovery to separate Replication Server

- Live in real time: Database is replicated to the second server
- Every 15 min: Uploaded file are copied to the replication server.
- Detailed logging 1 million database log records

Data retention

- Not limited by by server space. No automated deletions. Subject to PURCO SA policy when needed.

System track record

(since launch March 2022)

Online tender purchases
- 9754 since system implemented
- 2024: 3029 (to 7 October 2024)

Info session registrations
- 2023: 2475
- 2024: 3481

Online submissions
- 4684 since system implemented
- 2023: 1878
- 2024: 1916 (to 7 October 2024)

Largest eSubmissions to date:
- 2022
  - Single component tender
  - 141 bids averaging 200MB, Largest submission = 1GB
- 2023
  - Multi-component tender with 16 optional sub-tenders;
  - 273 purchasers
  - 204 bids comprising 15897 files (19.8GB), Largest single submission = 670MB

Incident today

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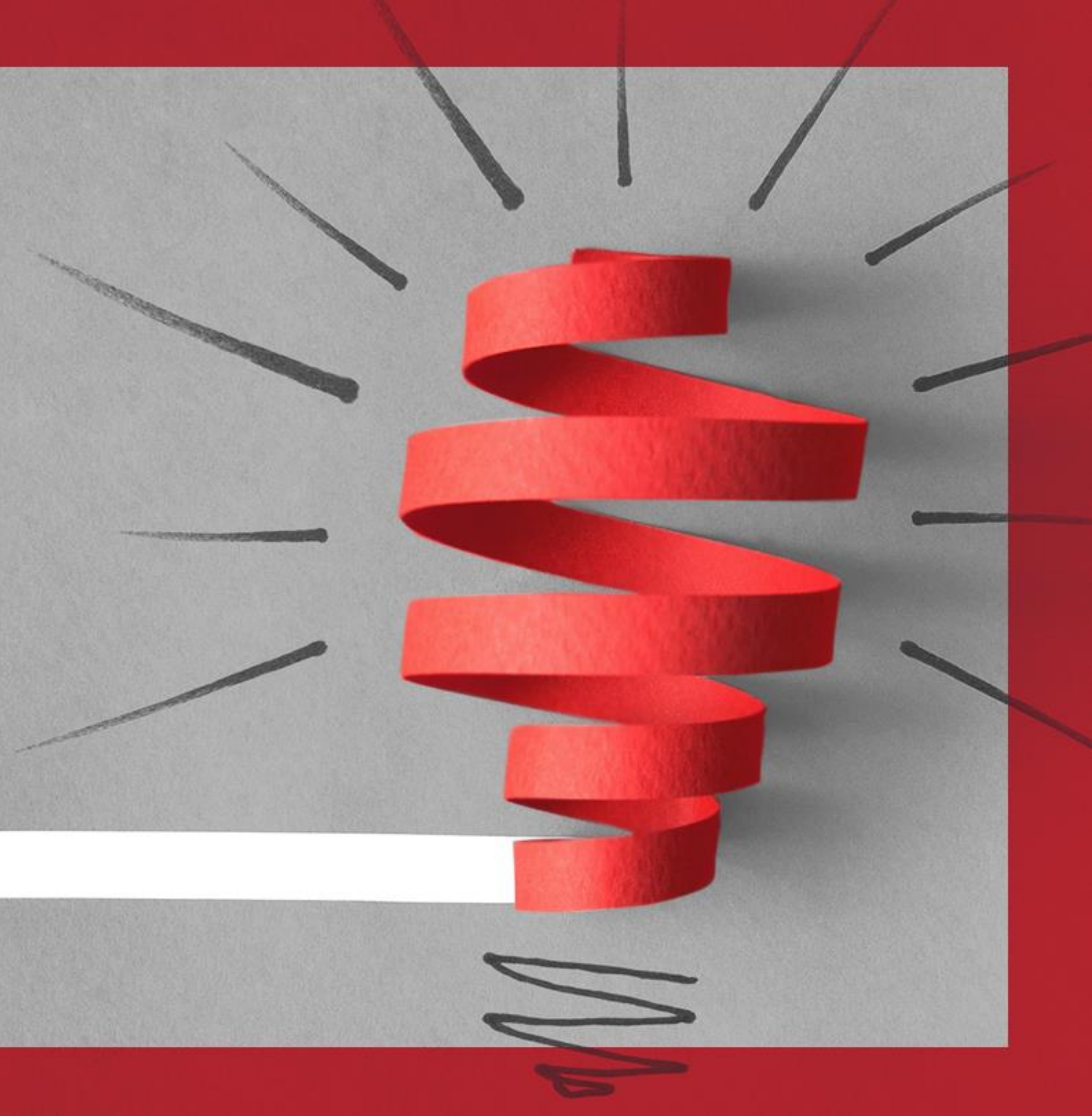
Incident

The Tender Management platform tracks and records numerous user interactions and data points to protect the integrity of the system. The system's functionality and integrity has been reviewed by Member Institutions, and has never been successfully challenged by any bidder.

The following enquiry (received today) is an example of an incident where system data and logs provided PURCO SA with the necessary proof to respond to an unfounded claim by a bidder.

PURCO SA ENQUIRY FROM CONTRACT ADMINISTRATOR

"We have a re-tender, and bidders who purchased the original tender document were invited to register for the re-tender and download the the new tender document at no cost. Bidders were given a deadline to do so, after which the normal tender price would apply.

Supplier#1 insists that they downloaded the tender document yet they can't find it under their company profile in order to submit a bid. They claim that the tender system is faulty and are demanding that PURCO SA allow them to submit a physical bid in contravention of the tender requirements. Please investigate.

Incident

OUTCOME OF INVESTIGATION

In order to access a tender document or submit a bid suppliers must either register (if the tender was free) or buy the tender.

Supplier#1 did not make an attempt to register for the tender before the free registration deadline, and did not purchase the tender after the deadline.

1. No registration or purchase record on the Order Report or Purchaser Report
2. No registration or purchase activity recorded on the supplier's CRM records.
3. No purchase record on Payfast Reports.
4. Login records reflect that the user logged in to the system four times on the two days preceding the free registration deadline.
5. The system records all clicks on Register / Buy Now buttons, capturing the user, date and time.
   - Supplier#1 did not click the Register button before the free registration deadline.
   - Supplier#1 clicked on the Buy button two weeks after the deadline but did not complete the purchase transaction.
6. IP address records reflect that the IP used by Supplier#1 is also used by Supplier#2. Supplier#2 registered for the free tender and downloaded the tender document. It was determined that the companies are owned by siblings and it is likely that the tender document downloaded by Supplier#2 was shared with Supplier#1, thinking that having the physical document would allow them to separately make submissions without registering or complying with the tender requirements, hence the demand to submit physical bids.

Records, Reports, Processes and

governance

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System records and reports

Standard reports:
- Mailing reports for tender invitation emails. Includes date/time, content, mailing list, delivery and bounce reports
- Information session registrations (person, company, email, date/time of registration)
- Tender Purchases Report per tender
- Tender Submissions Report
- Tender Evaluation Spreadsheets (details content of every tenderbox field)

The Tender system also records details of:
- When a tender is published and the staff user who 'owns' the tender.
- Tender orders (completed and incomplete orders)
- Bidder questions and answers
- User logins to system (user, login date/time and session end)
- Password reset requests
- Sent Mail Report
- Users who click to register or buy a tender
- User IP addresses when interacting with the system.
- System database logs (1 million records). The Database logging module captures system events containing usage data, performance data, errors, warnings and operational information

Access control:
Bidders

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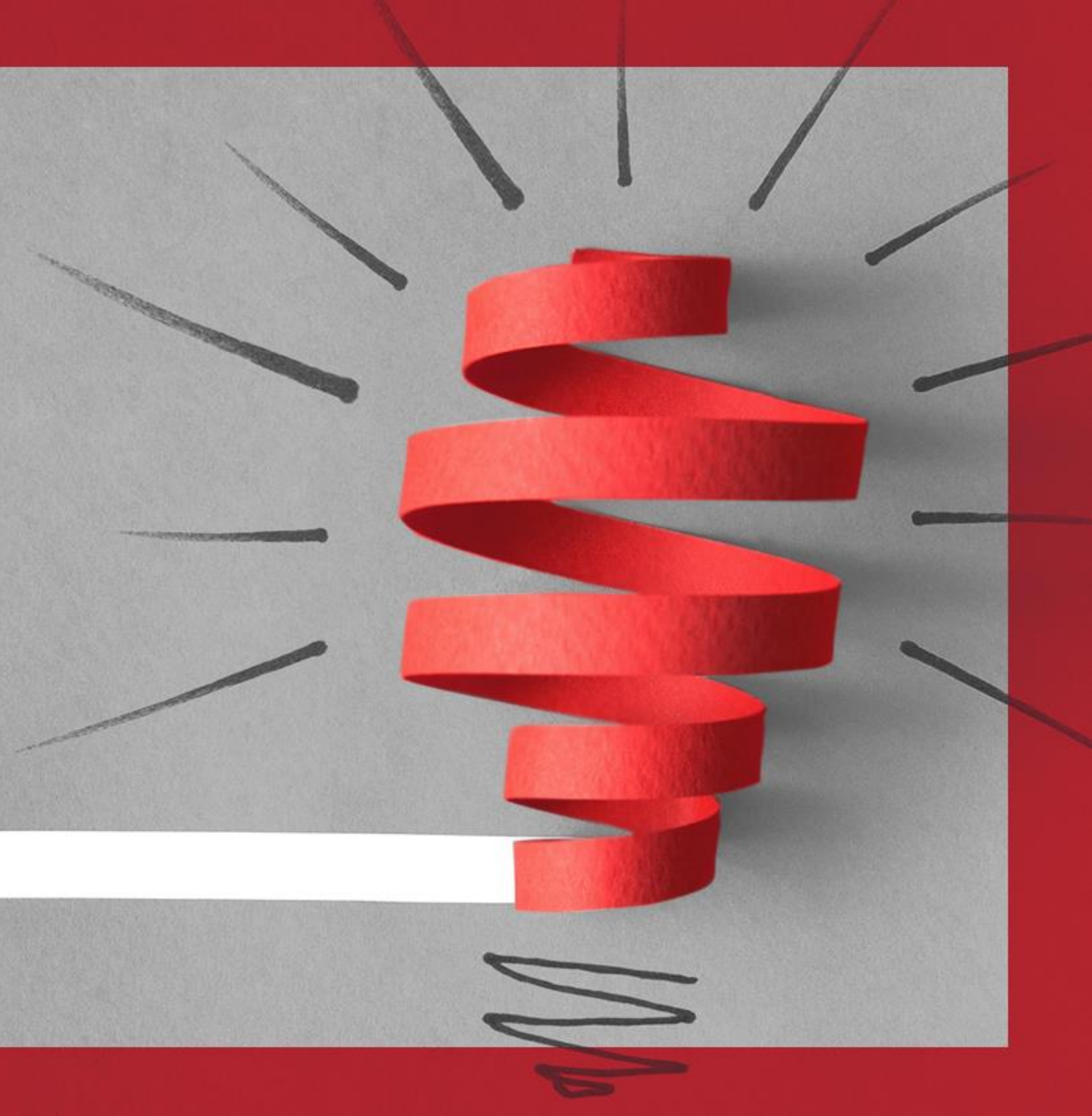
BIDDER access & control

User / role access control
- Users must be registered and associated with a company on the CRM system in order to register or purchase a tender.
- Only the registered user that purchased the tender can access or edit a tenderbox, or submit a Q&A message.

Date and time-based access control

Publication control
- Public tenders are automatically added to the public Tender List when published or at the publication time if scheduled for publishing
- Tender invitation emails can be scheduled for distribution.

Purchase deadline control
- Tenders are automatically removed from the public tender list at purchase deadline.
- System prevents purchases after deadline

Submission deadline control
- Automatically, at deadline time:
  - online tenderboxes are unpublished, preventing access by bidders.
  - system code prevents new submissions, uploads or changes to a draft or final submission.
  - date/time is logged when tenderbox is unpublished.
  - system code prevents bidder access to tenderboxes page after deadline.

BIDDER access & control

Q&A Alerts
- All questions about a tender must be submitted via the tender's Q&A system.
- All bidders can submit questions or comments.
- Every user who purchased a tender automatically receives emailed Q&A Alerts when any other bidder's question is approved by the Tender Author, or when the Author disseminates a message to bidders.
- All approved questions and answers are published on the tender website page, accessible to every purchaser of a tender. Purchasers can view all Q&As for the tender, even if submitted before they purchased the tender.
- All Q&As are permanently recorded and stored with the tender for review if required.

Tenderbox submissions
- Tender Authors align each tenderbox with the tender document, using the same requirements, wording, scores etc. to ensure commonality between the tender document and the tenderbox.
- All bidders complete the same electronic tenderbox so no bidder can be disadvantaged (tenderboxes cannot be changed if any draft or final bid has been submitted.
- Tender authors use the Q&A Alert system to automatically advise bidders when any changes are made to a tender or to any tender documentation .
- Tenderbox requirements can be set to 'required' to ensures bidders fulfil the requirements of the tender. The system alerts users to missing fields and prevents final bid submission if the missing fields are not completed.
- Bidders can make changes to their draft or final submissions at any time before the deadline.

BIDDER access & control

Submission emails
- The system sends bidders a Submission Email every time they save a draft or final bid.
- The Submission Email details the submitted contents of every tenderbox field and indicates if the submission is draft or final.
- Submission Emails are copied to an unmanned PURCO SA mailbox for retrieval PURCO SA by senior management if required to address any dispute.
- This dual system ensures that both the the bidder and PURCO SA have a definitive record of what the bidder submitted at each stage of their bid.
- Full details of all Submission Confirmation emails are recorded in a Sent Mail log. The log is accessible only by system administrators (PURCO SA staff do not have access to the log).

Alerts for draft and final submission
PURCO SA does not include draft submissions in tender evaluations. Bidders are alerted that draft submissions will not be considered in numerous ways:
- Tenderboxes have a Terms and Conditions notice at the top of the tenderbox form.
- Bidders must complete a required field specifically confirming they have read the T&Cs notice. Bids cannot be finalised if the Confirmation field is not completed.
- There is a bold red alert about draft submissions above the Save button on the tenderbox form.
- When bidders save draft submissions a popup alert is generated which must be manually closed.
- Every Submission Email indicates if the submission is draft or final.

Access control:
Staff users
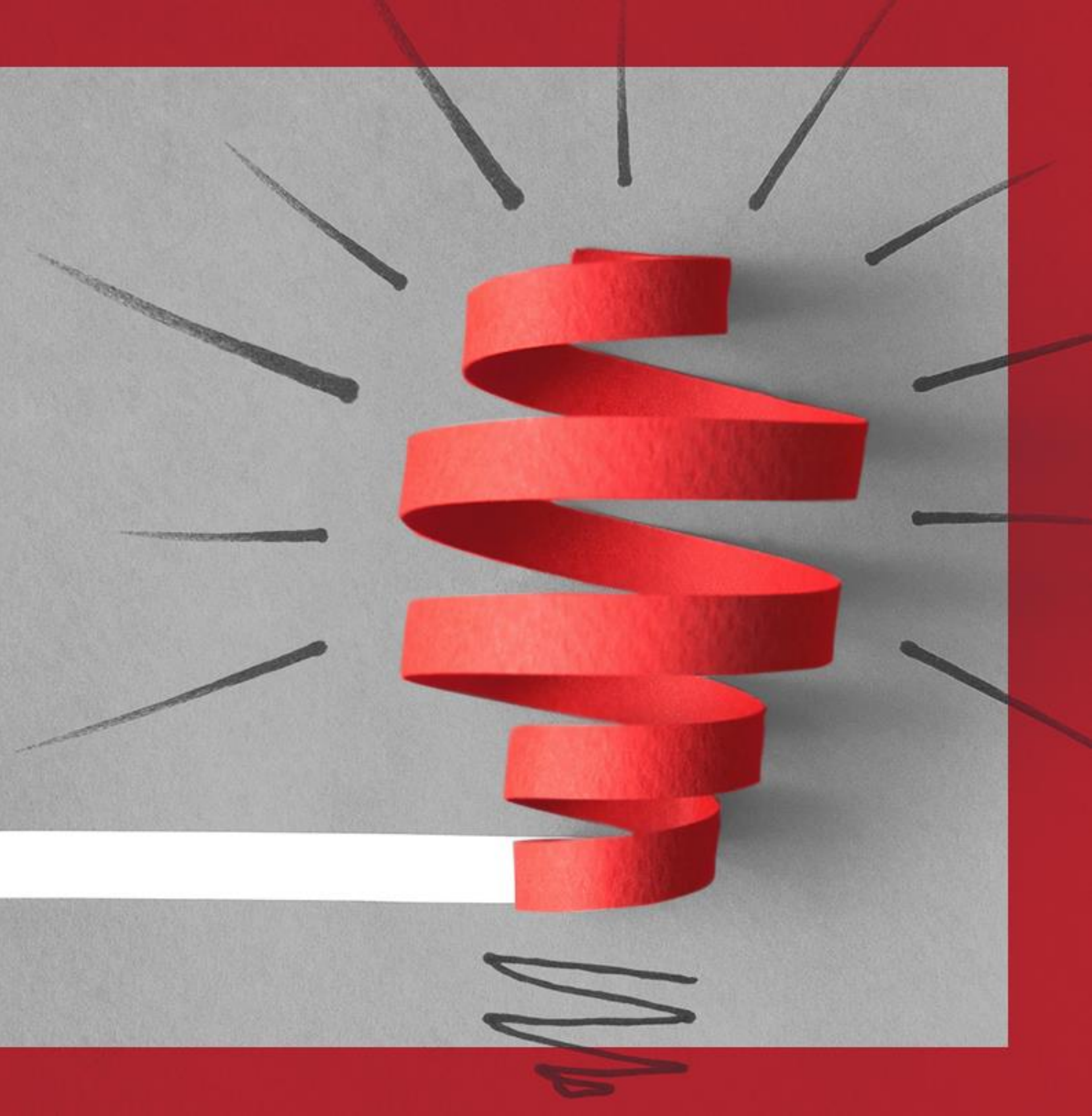
STAFF access & control

User / role access control
- Tenders can only be edited by the Tender Author.
- Tender documents can only be removed/added by the Tender Author.
- Tenderboxes can only be edited by the Tender Author.
- Tenderboxes cannot be edited after a bid has been submitted.
- Tender Q&A messages are accessible only by the Author and the Author's Contracts Manager. Only the Author can approve, reply to or create a new Q&A message.
- Submissions can only be accessed and evaluated by the Tender Author or designated users specified by the Author.

Date and time-based access control
- No staff user can view or access any submission details prior to the submission deadline.
- Prior to the submission deadline the Tender Author and designated users can access a list of who has submitted bids, but have no access to submission details, prices or uploaded files.
- At deadline the tender author and designated users are automatically given access to all tender bids, uploaded files and submission reports.

STAFF access & control

Bid assessment and evaluation

- Only the Tender Author and specifically designated users can view and/or evaluate tender bids.
- Only the Tender Author and specifically designated users can download bidder's files, Submission Reports and Evaluation Spreadsheets.
- Users cannot change any submission fields or uploaded files.
  (One exception – a second price field can be used by the Tender Author to record an alternate bid price if the price entered by the bidder is incorrect e.g it excludes VAT or there is a capturing mistake. The original price is retained and cannot be changed. Internal SOPs specify that the field can only be used with senior management approval).
- By default all tender submission fields are marked 'Not validated'.
- Evaluators manually mark each requirement as Valid or Invalid, and can append comments to each requirement field.
- Scores must meet the criteria set in the tenderbox setup e.g. max scores cannot be exceeded.
- All changes to requirement validity, comments, scores etc. are logged, including the username, date/time, previous and new field values.

Access control:
Member users

MEMBER access & control
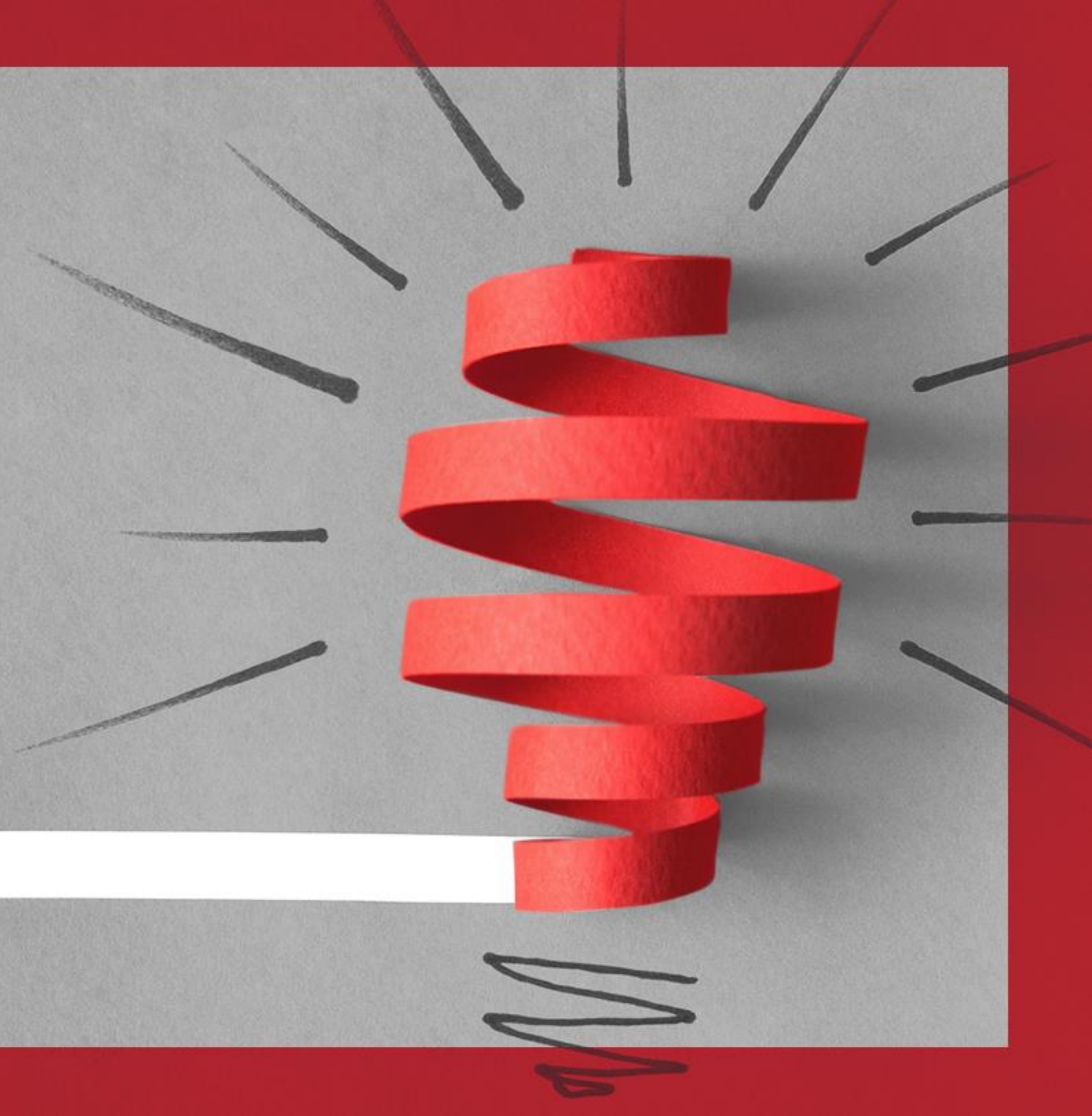
User / role access control

Tenders:
- Member users have no access to edit tenders.
- Member users can be given two access levels for tenderbox submissions:
  - View access: Only view submissions and evaluation results.
  - View and Edit access:
    - View, assess, score and comment on tender submissions.
    - Download tender reports and bid submission files

Contracts and contract documents
- Member users can view basic information about National Contracts and other Members' Contracts
- Member users can only access and download contract documentation for National Contracts or their own institution's contracts.

Date and time-based access control
- No Member user can view or access any submission details prior to the submission deadline.
- Prior to the submission deadline designated Member users can access a list of who has submitted bids, but have no access to submission details, prices or uploaded files.
- At deadline designated Member users are automatically given access to all tender bids, uploaded files and submission reports.