What is GitHub?

• Version control for code or data
• Can ‘tag’ releases so they are preserved and can be official publications like UN/CEFACT do i.e. ‘D21b’
• Use branches for developing and daily work on the next ‘release’ in public or private
• Allows ‘issues’ or ‘pull requests’ to be made by external contributors for consideration, but control remains with the repository owner
• Can assign changes to ‘reviewers’
• Allows viewing of the ‘changes’ made in that release or a ‘diff’
GitHub Features

• Github Actions
  – Allow **pre-defined repeatable tasks to be automated**, i.e. validation, code quality, produce excel, deploy to website
  – Run from commit to the ‘main’ branch or a ‘tag/release’
  – Could **update the UNECE website** for example

• Webhooks
  – Allow external parties to be updated automatically on a commit to main branch or tagged release

Live example of how this works!
How could these be useful?

• Github Actions
  – On publication of new release i.e. D22b we could **automate the production** of other deliverables such as the **json-ld vocabulary** from the **json schema**
  – Produce the **Excel versions of Code Lists** and **update UN/CEFACT website(s)**

• Webhooks
  – Example of UN/CEFACT Recommendation code lists to be published and **automatically notify and update related external parties**
    • UN/LOCODE update could be sent automatically to child code providers such as SMDG and BIC who can then automate the updates and programmatically check for deprecated UN/LOCODES for example
Quick Win?

• Code Lists
  – Where maintained on Excel could move to Github, see example of how DCSA are doing this to provide code lists to trade used in their information model.
  – Remove need to maintain on Excel, just use Github to manage change request (DMR) and have reviewers approve from domains.
  – Automates the publication on a new ‘tag/release’