

SATCODER

- Making Junction Coding Easier

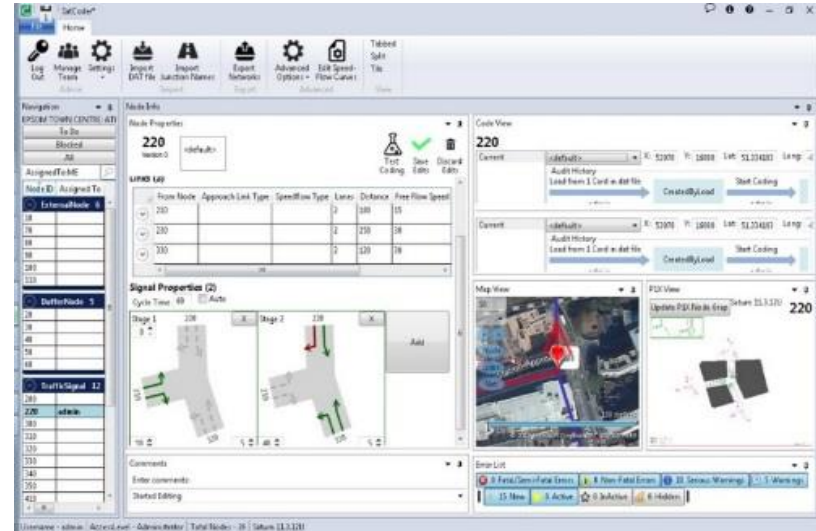
SATUGM16

Friday 4th November 2016



What is SatCoder?

- Interactive Network Coding tool
- Create transparent & accurate coding quickly
- Provides a rigorous Quality Assurance Framework
- Applications:
 - Beta v0.3+ Highways England RTMs
 - Full v1.3 Available to all users



Highways England RTMs

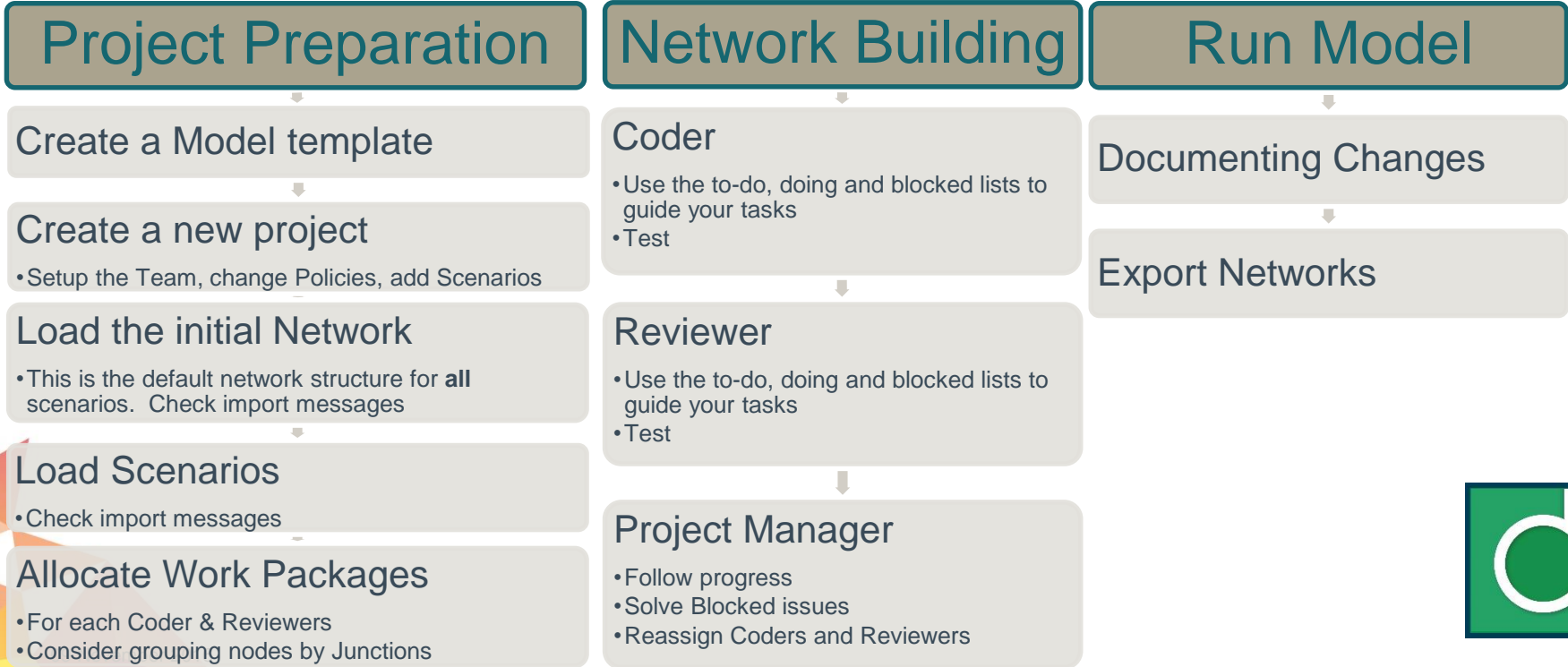
The SERTM coding challenge

- The Task
 - 13,200 Junctions split into
 - 1800 Signals, 2200 Roundabouts
 - 9000 Priorities & 200 Externals
- The Team
 - 15 Coders, 4 Reviewers split across 2 Consultants
- The Timescale
 - 3-month coding programme



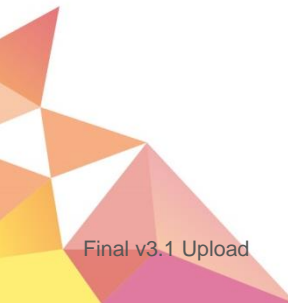
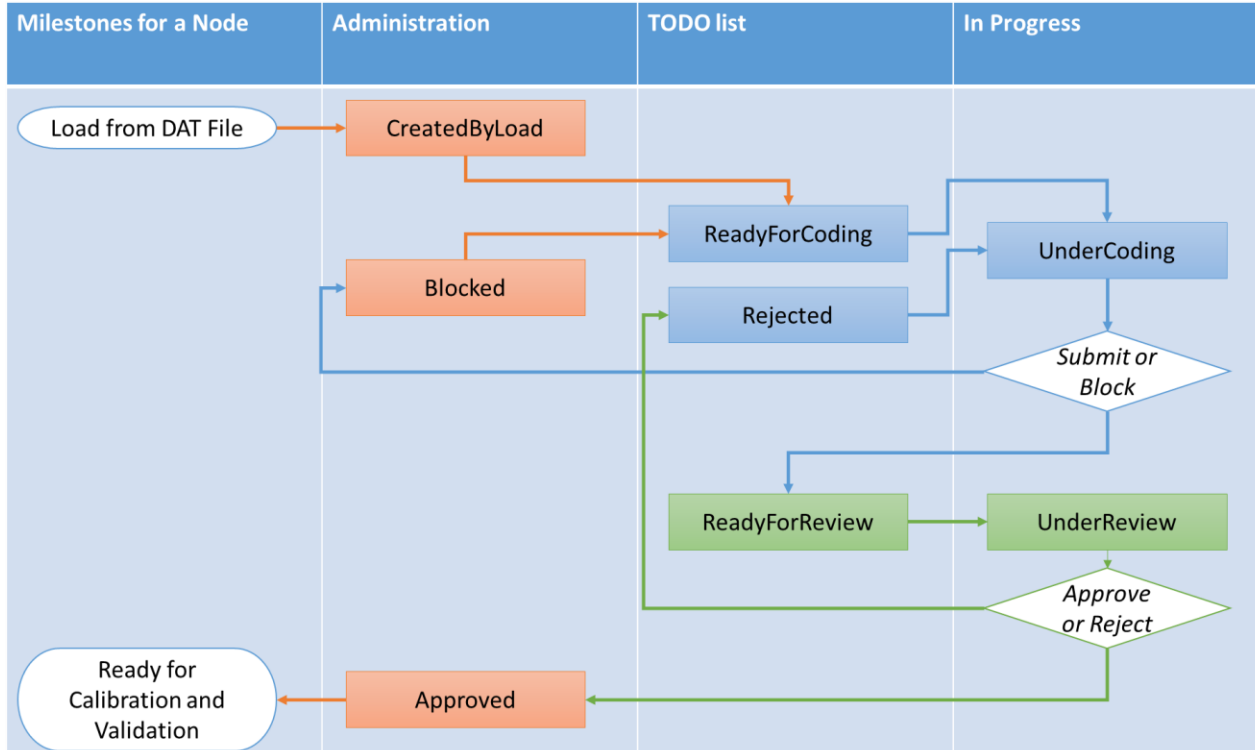
SatCoder Workflow (i)

Network Coding Overview (from Help File)



SatCoder Workflow (ii)

Network Coding Overview (from Help File)



Feedback from Project Managers

What it does well

- Easy to monitor progress
- Coders began slow whilst learning the software but picked up to rates of coding 70 nodes a day
- Any common issues could be noted
- Easy to allocate nodes to coders/reviewers
- Can monitor the accuracy of coding and guide the review process
- Consistent coding approach across different consultancies
- Complete QA process



Feedback from Project Managers (ii)

Areas for Improvement

- Whilst ITN2SATURN provided a good starting point ... very difficult to remove the need to amend the network structure
- Initial review undertaken for SRN + 2km band
- Base networks updated by re-running ITN2SATURN
- New 'Blocked' feature enables coders to quickly flag that network structure needs to be changed before coding



Feedback from Project Managers (iii)

Why they would use it again

- The number of nodes that can be coded is greater than existing 'manual' approaches
- Good QA
- Useable by novices and expert coders alike
- Readily scalable across available resources
- Easy to maintain a consistent approach to coding across many coders
- Everyone works on the same file/project so no need to combine multiple files together
- Once exported the network is in SATURN format automatically – no formatting issues



Practical Demonstration

Luke Davis, Atkins

Synchronising

Bringing everything back together

