Making Electrification Happen

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Structure

- RIA and the Supply Chain
- The Programme
- Technology / systems
- Logistics
- Resources
- Planning of Major Programmes
- Conclusion

RIA

- Represents the UK railway supply industry, except civils contractors
- 140 member companies
- Members supply national rail, London Underground, light rail, exports
- Significant membership growth in the last ten years
- Includes great bulk of sector by turnover
- Is funded entirely by its members

RIA Members include:

- Passenger train manufacturers/systems integrators
- All major signalling and most major telecomms firms
- All Track Renewal Contractors
- ROSCOs
- Major suppliers and other contractors
- Component manufacturers
- Numerous consultants and specialist service providers

Supply Chain

So the supply chain includes the expertise and can include much of the resource needed for successful roll-out:

- design
- supply of material
- contractors
- plant
- logistics

Making Electrification happen

- Absolutely endorse NR’s view that no one group alone can make this happen
- What can make it happen is cross-industry planning, communication and alignment

The Programme

- is not rocket science
- NR intend to use substantially tried and tested technology
- so we know how to do it
- the issue is organising that to deliver

The Programme - political context

The scene is changing fast:

Clear shift in Ministers’ position

- July 2007 White Paper “Some argue for prioritising network-wide electrification today. There are three main reasons for not pursuing this course… in the short term the key question is whether the benefits of such investment over 10-15 years are greater than its costs…” (paras11.27-28)
- 24 Sept 2008 Ruth Kelly: ”Labour will develop options for a rolling programme of electrification of our railways – potentially the largest programme of electrification in our history” (speech to party conference)

The Programme – business case

RIA represents the supply industry on Electrification Network RUS Working Group

- The WG is developing the business case
- Looking positive for GWML and (esp) MML
- Several principal factors involved
- But also now focussing on delivery

Delivery Issues

The key issues for delivery include:

- Technology/systems
- Logistics
- Resources

- all affect cost and therefore the business case
- all involve the supply industry fundamentally
- the supply industry is responding proactively to each

Technology / Systems

- Concentration until recently on DMU-served urban fringe / lightly used lines
- NR challenged RIA’s ELECTIG group to develop new approaches to electrification of such routes
- Aiming to simplify, and reduce cost and disruption to the railway

Working together

- Series of RIA / NR workshops held:
  - power supply
  - mechanical
  - signalling immunisation
  - plenaries
- Outcomes looked in particular at technical process, specifications, differentiation, innovation, simplification
- Much ‘doing it a better way’

Working together - 2

- Some aspects would benefit major schemes also
- A number of companies then in more detailed discussion with NR on costings for mainline applications
- Now preparing for further joint work on systems / technology / costs involving a broader group to take advantage of widest range of expertise

Logistics

Fundamental to the success of the mobile factory concept. Examples of essentials include:

- Uninterrupted possessions for the mobile factories
- Availability of depots of the requisite length
- Paths to site
- Availability of materials, materials trains, and paths
- Access to infrastructure for testing of plant
- Deliverability of single track working and of bi-di signalling to facilitate

Logistics - 2

Emphasise:

- absolutely not putting up obstacles
- but remembering them from past experience
- so that we plan how to overcome them
- forming joint working group with NR to help do so

Resources

Currently:

- virtually no new OLE in England & Wales in recent years
- virtually none in the Strategic Business Plan 2009-14
- so competent resources scarce
- New Year 2008 problems

Resources - 2

Moreover, there will be competition for resources from:

- London Underground
- National Grid refurbishment of power distribution network
- major railway projects overseas, including current labour sources in Europe

Resources - 3

- Yet vital that Network Rail gets the supply resources it needs in CP4 and CP5
- Means expanding the skilled labour market by investing in recruiting and training rather than poaching, excessive use of agency staff, and the wages spiral
- It is much cheaper, and leads to a better product

Resources - 4

Clearly a major programme

needs	skilled people. That:
needs	supplier confidence to invest.
needs	a reasonable ramp up in spend and communication

because going from a standing start direct to full programme will not work

Resources - 5

So we:

- Cannot simply start at full throttle at start of CP5
- Must ramp up in CP4 towards a rolling programme
- Need to recognise that the CP4 determination may need to be revisited if the business case warrants

Other activities

We have also:

- Been fostering awareness across the supply community of likely developments
  - series of major briefings
- And formed a joint group with NR on OLE competency standards

Competency Standards

- The group has been working urgently all year
- A draft NR standard is emerging with industry agreement
- This will:
  - provide demonstrable assurance of competence
  - encourage recruitment and further training
  - lead to further joint work on training to deliver the competencies

Planning of Major Programmes

- Three major investment programmes on the mainlines being developed concurrently:
  - electrification
  - ERTMS
  - Rolling Stock, especially IEP
- GWML expected to have all, plus Crossrail and Reading

Planning of Major Programmes - 2

- Potential synergies between them all, eg signal sighting, EMC, bi-di
- Conversely, the opportunity for sub-optimal solutions also considerable
- Cross-industry planning involving all parties essential in common interest

To conclude

- We can see this coming
- We do have time, though not too much
- We have a lot of knowledge of how to do it and a lot of understanding of the problems
- A good deal has been accomplished already, with much supply industry involvement
- We have the ability to plan and organise ourselves to deliver

Provided we get on with it!

Thank You

Railway Industry Association