

UK Ethylene System

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- Export facilities at North Tees & Mossmorran

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- The UK ethylene pipeline network has comprised the following ...

(FSEP	Fawley – Severnside)
TPEP	Trans-Pennine
SCEP	Stanlow - Carrington
WGEP	Wilton - Grangemouth
RSEP	Runcorn - Stanlow
MGEP	Mossmorran - Grangemouth
NWEP	North West
TSEP	Teesside - Saltend



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- Upgraded in 1981 with the installation of booster stations and Holford storage

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- Booster station capability installed in 1997

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- This provides a direct link between Grangemouth and Stanlow and forms the third leg of the network triangle

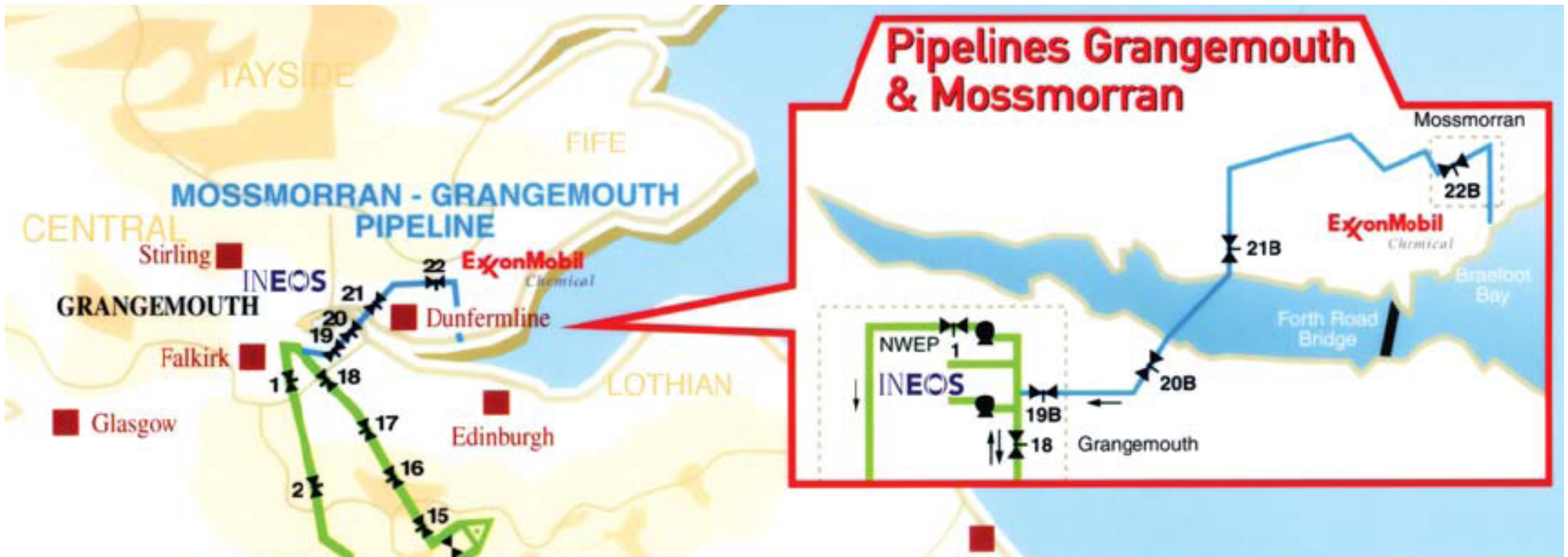
History - TSEP

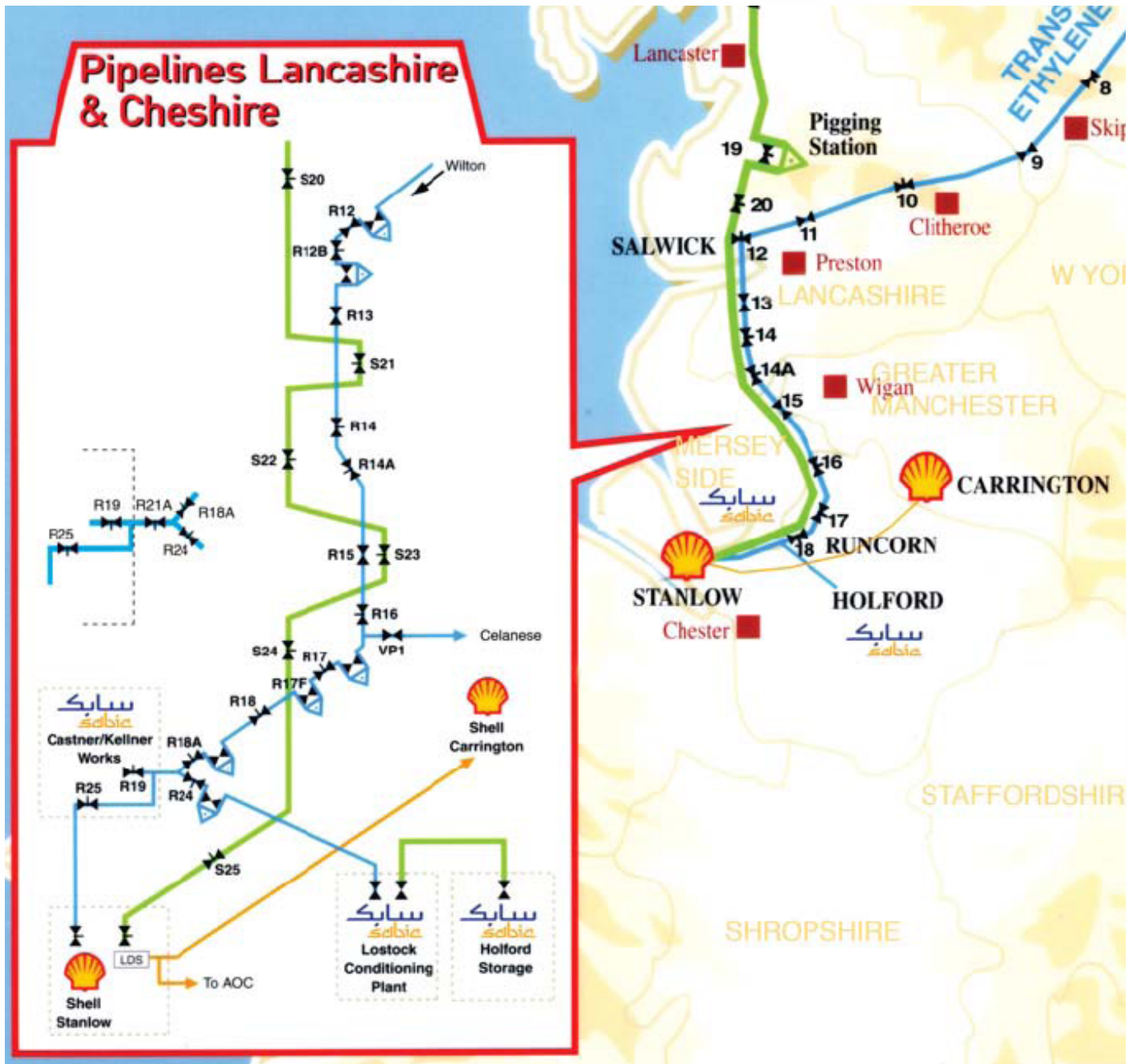
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- This new link was connected to the WGEP, providing an extended ethylene reservoir and connection of BP's production and consumption assets







The Ethylene Network – SH&E Benefits

- The alternative to the bulk transport of high pressure ethylene via pipeline is as a liquid (-103°C)
- Environmental penalties
 - liquefaction energy
 - road transport
- Safety risks
 - mobile major hazard
 - loading/offloading hazards

The Ethylene Network – Commercial Benefits

- With increasing production and consumption plant scale, plant outages create major impact
- The UK network provides the means to link production and consumption to bulk storage
- This allows quite large swings in supply and demand to be balanced
- Most plants on maintenance intervals of 3-6 years
- Network enables swaps within and outside the UK to manage these intervals
- Concept of virtual flows

