1. Grangemouth is an integrated refinery and petrochemical site and is one of eight refineries currently operating in the UK and provides about 11% of the UK’s refining capacity. The Grangemouth Refinery complex is the only major refinery located in Scotland and is the key source of supply to the Central belt of Scotland, providing the majority of Scotland’s road fuels via its road loading terminal and rail connections. The refinery supplies approximately 95 percent of the Scottish fuels market by road deliveries (estimates suggest there are some 650 road tanker deliveries a day from the site), but also supplies product via rail to the fuel terminals at Dalston (Cumbria) and Sunderland in the North East of England and by coastal tanker to Northern Ireland via pipeline transfers from Grangemouth to the Finnart Ocean Terminal. The Dalston and Sunderland terminals are important sites as they can be used to supply the lower borders region of Scotland. The Central Scottish Belt is particularly vulnerable to disruption as it is difficult to supply from alternative sources.

2. The Grangemouth refinery and petrochemicals facility is the largest INEOS production centre. It is a deeply integrated site exploiting synergies between the refinery and the petrochemical plants. Located 40 kilometres west of Edinburgh on a 1700-acre site, the petrochemicals facility manufactures over two million tonnes of chemical products per annum and the refinery has an annual capacity of nearly 10 million tonnes. The site is strategically placed as it has direct access to crude oil and natural gas liquids from the North Sea which the company transforms into petrol, fuel products and a range of olefins and polymer products.

3. It is also critical for oil and gas production through the Forties Pipeline System (FPS) due to the supply of utilities from the site, especially steam to the BP Kinneil processing terminal. The FPS was established by BP in 1975, directly linking the Grangemouth refinery to the North Sea oil fields, gathering crude and condensate from over 70 separate fields. The pipeline continues overland to the processing terminal at Kinneil, adjacent to the Grangemouth refinery complex, where the crude is stabilised. Separated gas is recovered for use in the Grangemouth petrochemicals complex or for supply as refrigerated Liquid Petroleum Gas (LPG).

4. The Grangemouth refinery site also includes a power station, owned and operated by INEOS, and a CHP plant which is operated by Grangemouth CHP Ltd. Both steam and electricity generated by the CHP plant service demand from BP Kinneil. The low and high pressure steam supplies are particularly critical for the operation of Kinneil, although separate power and cooling water supply is available for one of the processing trains.

5. Grangemouth traces its origins back to 1924 and up until 2005 was owned by BP. In December 2005 INEOS purchased Grangemouth Refinery from Innovene, BP’s olefins and derivatives and refining subsidiary, and formed INEOS Refining (a separate business within the INEOS Group). INEOS also acquired the Finnart Ocean terminal and associated pipelines running from Grangemouth to Finnart. Since the acquisition, Morgan Stanley has been employed by INEOS Refining to source crude oil for the refinery.
INEOS

6. INEOS is one of the world’s biggest chemicals companies with over 70 manufacturing sites and 16,000 employees. INEOS is a highly leveraged company and has borrowed heavily to acquire new businesses. As a result, INEOS’s net debt stood at €7.4 billion in June this year. The company successfully re-negotiated its debt arrangements with its banking consortium in 2009, under these arrangements it is limited to capex for statutory health, safety and environmental investments only. Other commercially important capex, including up-grading of their Grangemouth cracker (a high energy plant used to convert oil and gas to products used in the chemical industry), has been put on hold pending agreement about a bank loan and grant from the Scottish authorities. Originally INEOS had planned to shut its old, oil-fed cracker (G4) and upgrade the newer gas-fed unit (KG) to more readily accept the changing quality of supplies from the North Sea gas fields. The original cost was estimated at €120m. Due to the capital restrictions, the project has been delayed and the latest information we have is that INEOS may seek to extend the life of G4 until the position on funding can be resolved, and provided they can extend their operating licence.

7. With the general economic recovery, INEOS’s overall profitability has improved with (EBITDA) earnings of €972m in H1 2010, up 75% on H1 2009. The refinery business, in common with other operators, is severely underperforming and made only €6m in H1 2010, including a €32m loss in the second quarter. INEOS’ credit rating has been upgraded recently but remains low with Standard & Poor indicating B-. The overall position is of a company that has very large debts, is capex constrained, and which was badly hit by the downturn. Management has developed a robust response whereby Group profitability is currently back to pre-recession levels.

The UK downstream market

8. Over the past two years, DECC has undertaken collaborative work with the downstream oil industry in the UK to examine broad market trends and their implications for supply resilience. Overall, this work has concluded that the UK has a mature and highly competitive downstream oil market. Wood Mackenzie concluded that the position of UK refineries is poor relative to their European competition. This is due to structural factors (e.g. central European markets are landlocked and hence less open to imports and competition) and the fact that UK refineries process higher quality (and hence higher cost) North Sea crude feedstock than is the case in much of Europe. Intense competition has characterised the retail fuels market for more than a decade with:

a. significant inroads into the market from supermarkets with a consequent pressure upon fuel margins;
b. a significant rationalisation of the number of sites across the UK; and
c. a greater strategic focus upon non-fuel income.

d. Overall, the work identifies a long term trend towards rationalisation in the UK refining industry, low levels of non-discretionary investment in the

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1 via the Downstream Oil Industry Task Group (DOITG)
2 Wood Mackenzie estimate the average, net cash retail fuel margin for 2005-2008 to be under 3 pence per litre, report p. 31
3 there were 19 UK-based refineries in 1975, there are now 8, there were over 37,500 service stations in 1970 there were 8,921 at the end of 2009 (UKPIA Statistical Review 2010 (p. 13 and 27)
downstream oil infrastructure (notwithstanding some limited investment particularly in coastal storage facilities by smaller, independent fuel suppliers and specialist storage companies), static total UK oil demand and a decreasing level of demand for petrol/increasing level of demand for diesel and jet fuel (UK refineries are typically configured to produce petrol as a result of historical demand patterns).

9. DECC is currently working with the DOITG to finalise a report for Charles Hendry which provides a more detailed overview of the downstream oil market and related issues; Ineos is represented on the DOITG via its UK Trade Association, the UK Petroleum Industry Association (UKPIA).

10. The fuels market in Scotland has undergone significant changes in recent years in addition to the Grangemouth sale; recently Aberdeen and Inverness fuel terminals were bought by DCC Group (an Ireland-based petroleum product distribution company) from BP; fuel supply arrangements to the Scottish Highlands and Islands have also changed this year as ConocoPhillips have concluded negotiations to take over a long-term fuel supply contract from BP, shipping product from Humber refinery to a number of Highlands and Islands fuels terminals. A 5 year supply contract was agreed between the parties, with effect from 1 June 2010. In previous years, product to supply this contract was sourced from Grangemouth Refinery.

11. Overall, the above trends provide a highly challenging context for INEOS’ refining business in the UK; DECC and the Scottish Government retain a strong interest in developments that relate to the future of the site.

12. INEOS is reported to be in talks with PetroChina to obtain an overall stake or obtain key parts of the Grangemouth Refinery since 2009. Jim Ratcliffe, CEO and major shareholder, met with Lord Davies in early October 2009 and amongst other topics, the issue of attracting a substantial equity injection was discussed. Talks between the parties were also confirmed at a recent industry conference (3 October, by Tom Crotty, a director of the company). If there is any investment by PetroChina, it would appear that the most likely result would be a Joint Venture with the continued operation of refinery by INEOS.

Industrial Relations (IR)

13. The main trade union at Grangemouth is Unite. At present there are no reported IR related problems, however Unite union member workers at the site held a 48-hour strike from 27-29 April 2008 over a dispute concerning future pension arrangements. The strike forced the temporary closure of the refinery and the Forties pipeline system.

14. The run up to the strike, which was covered in the national media, resulted in a significant surge in fuel demand in Scotland ahead of the strike and a consequent reduction in daily demand during the strike itself; by midday on 29th April there were only 25 petrol stations with partial stock-outs in Scotland out of a total (in 2008) of 956. As the strike concluded by 07.00 on 29th April, the replenishment efforts had managed to return to near normal levels.
of stocks via imports to sea-fed terminals and through the ramping up of production at the site was able to meet the next „wave“ of local demand. Steam was gradually restored to BP Kinneil starting on 29th April; full operations were restored to that facility by 5th May.

15. The Government established a joint response team in BERR, instigated daily reporting of stock levels from oil companies and encouraged demand calming measures but did not deploy any of the measures available to it in the NEP-F. Statements were made in the House by Government Ministers6 and Rt. Hon. John Hutton visited Scotland on 29th April and met with local fuels distributors.

16. Overall, given the economic state of the market and INEOS”s highly leveraged position, staff costs/pensions arrangements and related possible IR unrest are likely to remain an area of potential vulnerability for the company.

7To offset the decline of ethane supplies from the NS, Ineos is upgrading its gas cracker to take a greater proportion of non-ethane feed, currently the limit is 20%. To be effective, Ineos must secure additional supplies of propane, hence their discussions with S/E. Importing the additional propane by ship is not feasible given infrastructure limitations at the dock and BP”s pipeline system.

Site security

17. The FPS, BP Kinneil and INEOS Grangemouth are all Category 4 CNI assets, based upon the impact of their loss. The Joint Terrorism Analysis Centre (JTAC) assess the threat of terrorism at oil and gas sites as „moderate“, meaning „an attack is possible but not likely“. As with all CNI assets, INEOS at Grangemouth have received security advice from CPNI (Centre for the Protection of Critical Infrastructure) on proportionate security mitigations. INEOS have, however, declined to take up these recommendations (costing between £4 & £6 Million) because they do not see themselves as the direct beneficiary, cannot afford these measures and are restricted on non-regulated expenditure as part of their debt agreement. In addition to their own risk and that of fuel supplies of Scotland, the site”s vulnerabilities impact BP Kinneil and UK gas supplies due to the interdependencies mentioned earlier. OGDs are watching closely to see how DECC resolves this issue, due to the potential precedent we may set (this is the first and only example to date of a CNI owner/operator deciding not to act upon CPNI”s recommendations). A submission will go to Charles Hendry setting out the issue in further detail, which you be cc”d on.

Lines to take (if needed):
I understand that you are in discussions with the Scottish Government and DECC regarding the security advice CPNI have proposed for your site.
It is important that such critical assets have proportionate counter terrorism protection, but I recognise that this must be proportionate to all parties – including yourselves.
I hope that we can all continue to talk these issues through and reach a satisfactory conclusion.

Feedstock supply

18. Shell/Exxon (S/E) own a pipeline which links their cracker at Mossmorran to the Ineos complex at Grangemouth. Currently the pipeline is used occasionally to ship ethane (only) to Ineos, particularly when the Mossmorran cracker is down for maintenance. Due to diminishing supplies from the North Sea, Ineos will in future (beyond 2016) be progressively short of material for its cracker operations7.
Ineos therefore proposed that the existing pipeline be re-configured to supply propane as well as ethane to Grangemouth – currently the surplus propane from Mossmorran is exported for use as a fuel by S/E via the nearby terminal at Braefoot Bay. The attraction for government is that by processing propane at Grangemouth into chemical derivative products, more of the value added remains within the UK economy.

19. The cost of adapting the pipeline is estimated at £20m. Ineos entered into commercial discussions with Shell as the lead party; Shell indicated that they valued the proposal at £40-80m which Ineos claim was similar to their offer. However, after some deliberation Shell wrote to Ineos rejecting the offer on three grounds – engineering resources were limited and this was a low priority project, safety issues, and operational/commercial complexity (e.g., hydrocarbon accounting). [This is consistent with comments made earlier to Chemicals Unit by Shell.] Shell also communicated their position to a number of politicians and officials in Scotland including Jim Mather MSP, Energy Minister and Michael Connarty, MP covering Grangemouth.

20. Subsequently Ineos has made a revised offer which involves propane only. Technically this is a less complex option and would be based on a tiered tolling charge on the volume of propane transported. Ineos has asked for a formal reply by 15th October; the timing has been chosen to allow sufficient time to work up the project to coincide with planned maintenance on the pipeline. Both Shell and Exxon have come back with points of clarification on the new offer and Exxon has implied there may be the prospect of further negotiation around the new deal.

21. Grant indicated that if the latest offer were reject without the prospect of agreement, then Ineos was willing to invoke a Statutory Review under the relevant infrastructure Code of Practice (owned by DECC – Robert White of the Energy Development Unit). Although a straight commercial solution, possibly involving arbitration, is still possible, Ineos believe that a Review is the mostly outcome. Ineos have been in contact with Robert White of DECC on this issue.

Lines to take (if needed):
We are aware of the infrastructure access issue between Ineos and Shell/ExxonMobil. Government would strongly prefer to see a negotiated settlement between the parties concerned. I understand, however, that you have established contact with officials in my Department concerning the relevant infrastructure code of practice; this avenue is open to you should you choose to pursue it.

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GRANGEMOUTH REFINERY: PHYSICAL SECURITY

ISSUE:
1. Ineos’s Grangemouth refinery has received security advice from CPNI to mitigate against the risk of a terrorist attack. Ineos has informed the Scottish Government that they are not prepared to undertake this work (at a cost of £3.5 to £6 million), explaining it is unaffordable against their budget for capital expenditure and that they are also constrained by the terms of their debt arrangements to only fund non-discretionary expenditure. A terrorist attack on energy assets across the UK is assessed as possible but not likely; nevertheless, the vulnerability of Ineos refinery (which supplies steam and other utilities to the adjacent oil and gas processing plant at BP Kinneil) increases the risk of a successful terrorist attack against BP Kinneil which could impact oil and gas production through the Forties Pipeline System.

HANDLING:
2. There may be an opportunity for Moira to raise this issue during your visit. However, it should be handled sensitively. If an INEOS Board Member is present, there may an opportunity to note the important of this site to UK energy supplies (especially fuel supply to Scotland), and our desire together with the Scottish Government to work with Ineos to manage the risk of a successful terrorist attack by implementing appropriate protective security. You should be aware, however, that Gordon Grant (Refinery Manager at Ineos Grangemouth) has made his position clear, in that if we (HMG & Scottish Government) consider there is a need to implement protective security measures (fences, CCTV and alarms) to mitigate the risk of a terrorist attack, then HMG and Scottish Government should pay. Mr Grant has made it clear that he does not have the budget and we do not believe he will appreciate being pushed hard on this point. Nevertheless, if the opportunity presents itself, Moira might wish to mention that we consider the Grangemouth refinery a critical site for energy supplies to UK, in particular Scotland, that she understands that resources are scarce, and that she hopes that there is a way that we can work with Ineos, the Scottish Government, and other interested parties to resolve this issue.

LINES TO TAKE:
For Ineos Board Member:
- The Grangemouth site is critical to meeting UK’s energy needs including supply of petrol and diesel into Scotland central’s belt. CPNI advice and

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recommendations to improve security are not made lightly but based on extensive
knowledge and experience. Implementation would significantly improve security at
Grangemouth and improve protective security, resilience. Urge you to consider funding
this work

For Gordon Grant:
I understand your situation, and appreciate your continued openness with the Scottish
Government and ourselves. We would very much like, together with the Scottish
government, to continue to work with you and importantly your Board to explore all
avenues for progressing this issue.

BACKGROUND:
See attached DRAFT submission PROTECT – POLICY & COMMERCIAL 20
PHYSICAL SECURITY - GRANGEMOUTH REFINERY

ISSUE
1. CPNI has undertaken a vulnerability assessment at the Grangemouth refinery in Scotland, owned and operated by Ineos. It has recommended a number of improvements to physical security at the site to mitigate the risk of a terrorist attack. However, Ineos has claimed that the necessary investment is unaffordable in the wider context of its already high debt burden and the nature of its debt arrangements recently re-negotiated with a banking consortium. To date, other refining companies have invariably acted on CPNI advice and implemented improvements to physical security. This submission discusses what can be done to promote the required investment at Grangemouth.

RECOMMENDATION
2. That you:
   a. Note that this is the first instance where a company has decided not to undertake investments to mitigate security vulnerabilities, so we need to avoid setting a precedent of government support for any future company in similar circumstances;
   b. Note that we have been working closely with CPNI, the Scottish Government, and Department of Business Innovation and Skills (BIS) to try to resolve this matter;
   c. Note that the current terrorist threat level for Gas and Oil is assessed as „Moderate“, meaning an attack is possible but not likely, and;
   d. Further advice will be provided in Q1 2011 when the actions set out in paragraph 8 have been completed.

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KEY POINTS

3. DECC works together with the Centre for the Protection of National Infrastructure (CPNI), a branch of the Security Service, to enable the implementation of proportionate physical, electronic and personnel security measures at Critical National Infrastructure (CNI) sites across the gas, electricity and oil sectors. The approach HMG has traditionally taken is that the beneficiary pays for implementing security enhancements passing on the costs, as necessary, to energy users. The way in which the Electricity and Gas networks are regulated by Ofgem has enabled the owners of CNI assets in these sectors to pass through these costs within their regulated charging mechanisms. In contrast, the downstream oil industry is not regulated in this way, is subject to intense international competition, and does not have the same ability to pass on the costs of security mitigations to their customers without compromising their competitive positions. Nonetheless, major refining companies within the downstream oil sector have to date acted upon CPNI advice and have undertaken investments to improve physical security at their sites.

4. Located in central Scotland, the Grangemouth Refinery (owned and operated by Ineos) is a Category 4 CNI site, in part due to its interdependency with significant BP assets (also at Category 4) comprising of the Forties Pipeline System and Kinneil oil and gas processing facility. The Ineos refinery is also critical for supplying oil products, including transport fuel, to Scotland’s central belt. Like all other CNI sites, Ineos has received a number of recommendations from CPNI to improve its physical protection from a terrorist attack (such as improved perimeter fencing, CCTV and alarms). In response to these recommendations, Ineos has explained that it is not prepared to undertake any of these mitigations because it cannot afford to do so and, even if it could afford this expenditure, it does not see itself as the beneficiary of the enhancements proposed.

8 Critical National Infrastructure (CNI) sites are grouped into five categories to prioritise resources based upon the impact of their loss, Category 5 being the highest. The loss of a Category 4 would present a “severe” impacts to the UK which for energy equates to a loss of electricity supply to >1 million for >18 hours, loss of gas to >1 million for >28 days, or loss of fuel >20% of national demand of up to one week.

5. There is therefore a cluster of CNI sites at Grangemouth, with complex interdependencies, which means that the critical operations of these sites are vulnerable by virtue of the security vulnerabilities of one. Specifically, lack of action to improve security by Ineos could expose BP’s FPS to greater vulnerability.

Forties Pipeline System

6. BP owns and operates the Forties Pipeline System (FPS) and the associated oil and gas processing plant at BP Kinneil. FPS is a 100% BP-owned integrated oil and gas liquid transportation and processing system with a nominal capacity in excess of one
million barrels per day serving the central area of the North Sea. FPS transports crude oil and gas liquids from 70 offshore and onshore entry points, processes the liquids at Kinneil and redelivers to the customer Forties Blend crude oil at Hound Point, and Raw Gas and fractionated Gas Products at Grangemouth. Because much of the UK indigenous gas production now comes from offshore oil fields, the loss of any element of the FPS, including Kinneil, would lead to significant immediate reductions in supply to St. Fergus, Teesside and Bacton. Supply of gas to the national transmission system at St Fergus is also dependent upon the capability to transport associated natural gas liquids (NGLs) to Kinneil for processing, although there is an alternative export route for most of these NGLs if the Mossmorran plant is available.

7. Previously, BP had installed temporary packager boilers at Kinneil to allow it to continue to generate steam to operate one of the three processing trains in the event of loss of steam supplies from the Grangemouth site. Such a volume of steam could also be used to keep critical plant and equipment at Kinneil "warm" to allow a more rapid restart to operations. However, we understand that these boilers have now been removed, and although they could be re-installed we note that BP have questioned their long term viability and reliability. There are other utilities that need to be provided by Grangemouth (electricity and cooling water), as well as continued export routes into Grangemouth for raw gas and fractionated gas products from Kinneil, in order that FPS can operate. According to BP, to make Kinneil fully independent of Grangemouth would take several hundred million pounds. The loss of the export route into Grangemouth for gas and other product would also mean that BP would have to flare these substances, and they don’t think their flare tips would last more than a week of continuous flaring. Such a highly visible action is also likely to draw concern from local residence and others on safety and environmental grounds.

Physical security at Grangemouth refinery site
8. CPNI has recommended that a number of security enhancements are made at the Grangemouth site costing £3.5 to £6 Million. They focus on the need to protect plant and equipment that provide the refinery and BP Kinneil with its utilities (in particular steam supply), and protect the port and road loading facilities for inport and export of oil product.

9. Ineos has informed the Scottish Government that they can see no commercial justification for it to make this expenditure. In the current economic climate, Ineos claims that such an investment at the refinery could only be funded from its existing capex budget, which is already allocated to ensure they meet their statutory requirements for safety and environmental protection. We understand that these restrictions, to only fund statutory requirements, is also a term of its recently re-negotiated debt arrangements.
NEXT STEPS

10. We have explored with Legal whether the Secretary of State could direct Ineos to fund this work. We have not identified any mechanism for doing so. In the circumstances, with your approval, we will take forward the following actions.

a. Discuss with the Scottish Government, which is in the process of reviewing a grant application from Ineos to renew critical production equipment at its chemical processing plant at Grangemouth site, the scope to make the implementation of these security mitigations a condition of the grant;
b. Discuss with BP the extent to which it might be willing to fund these security mitigations to reduce the vulnerability of its own assets;
c. Explore possibilities to engage with Ineos at a more senior level to seek to encourage them to reduce the risk to its own assets and income streams (Moria Wallace is visiting Grangemouth on the 8th October, and depending upon the level of representation from Ineos this could present an opportunity to move this discussion forwards);
d. Explore with Ofgem the possibility of utilising gas transmission charges as potential funding stream for this security work; and
e. Continue, together with the Scottish Government (which is responsible for consequence management in Scotland) and other partners, to assess the longer term implications of the identified vulnerabilities and associated risk exposure

DETAIL

11. The Government’s approach to implementing National Security across all sectors within the CNI has traditionally been based on the premise that the “beneficiary” pays for security enhancements. In almost all cases, across all CNI sectors (wider than Energy), HMG has been able to balance the commercial risks to the owner/operator with national security risks to the UK. When such alignment is realised, leading to a shared “risk appetite”, the private sector company has funded the security mitigations. Indeed, there are eight operational oil refineries in the UK (all of which are Category 4 and Category 3) owned by a variety of market participants. All have received site specific vulnerability assessments undertaken by CPNI, and most have acted upon this advice and implemented enhancements to their physical, electronic, and personnel security. Although one (Lindsey Refinery owned and operated by Total) has yet to undertake the mitigations CPNI have proposed, we remain in dialogue and anticipate mitigations to be implemented

12. We have discussed this issue at official level within the government’s Counter Terrorism structures, and received strong steers from all departments that they would be concerned if DECC, notwithstanding other constraints on public expenditure, provided public funding to address this risk. Not only would this potentially antagonise those private sector operators who have already funded such enhancements, it could also discourage operators at those sites which have yet to
fund their own security mitigations, sending them a signal that if they refuse HM Government could provide funding.

13. The threat level to onshore energy assets is currently assessed to be MODERATE (a terrorist attack is possible, but not likely), although the overall terrorist threat to the UK is assessed to be SEVERE (an attack is highly likely). A terrorist attack at the Ineos refinery could disrupt supplies of oil products into Scotland, in particular the Scottish central belt. Such an incident could lead to a total shutdown of the refinery, but unless the port and road loading facilities were also disrupted or damaged, it would still be possible to import oil products via the jetty to serve the Scottish market. In the short term, fuel supplies to Northern Ireland and the north of England could also be disrupted as some product is sourced from Grangemouth to these regions; over time, demand signals are likely to stimulate supply from other sources although this is likely to involve longer journey times and stretch the capacity of existing logistics systems.

14. There is, also a risk of disruption to gas supplies, as a loss of BP Kinneil could result in loss of up to 65mcf/d of gas. In winter, this could be around 14% of demand (NB record gas demand on 8/1/10 was 465 mcm). Such a loss is likely to be manageable unless there were coincident disruptive events. For example, last winter, high gas demand due to very cold weather and loss of gas supplies from Norwegian gas fields in excess of 50 mcm was managed through flowing gas from storage, LNG and additional imports through IUK (continental interconnector).

15. We must also, however, recognise the financial position of Ineos. To achieve its current position as one of the top five chemical companies in the world, it has borrowed heavily to acquire new businesses, the most significant being the purchase of BP’s chemicals in 2005. As a result, Ineos’s net debt stood at €7.4 billion in June this year. The company successfully re-negotiated its debt arrangements with its banking consortium last year, and (as noted above) under those arrangements is limited to capex for statutory health, safety and environmental investments only. Other commercially important capex, including up-grading of their Grangemouth cracker (a high energy plant used to convert oil and gas to products used in the chemical industry), has been put on hold pending agreement about a bank loan and grant from the Scottish authorities. With the general economic recovery, Ineos’s overall profitability has improved with (EBITDA) earnings of €972m in H1 2010, up 75% on H1 2009. The refinery business, in common with other operators, is severely underperforming and made only €6m in H1 2010, including a €32m loss in the second quarter. Ineos’s credit rating has been upgraded recently but remains low with Standard & Poor indicating B-. The overall position, is of a company that has very large debts, is capex constrained, has been badly hit by the recession, but is now gradually improving. A requirement that Ineos invest £3.5 to 6m on additional security measures is therefore very problematic for them at this time especially for their refinery business.