



**Committee on the Marine Transportation System
and
The Cotton Club
Public-Private-Partnership Roundtable
May 7, 2015
Norwegian Embassy**

PROCEEDINGS

Cotton-Club-CMTS
P3 Best Practices Roundtable
Norwegian Embassy
May 7, 2015

- **Attendance –**

- **COTTON CLUB**

- Mr. Ivar Engan - Norway
 - Mr. Michel Wallermacq - Belgium
 - Ms. Jaenneke De Vries – Netherland
 - Mr. Ryan Naulty - United Kingdom
 - Dr. Stephan Zass - Germany
 - Mr. David Batchelor - European Union
 - Mr. Yoshiro Taguchi - Japan
 - Mr. Nicola Carbone - Italy
 - Mr. Bart de Jong – Netherlands (replacing Ms De Vries in August)

- **CMTS**

- Ms. Helen Brohl – CMTS
 - Mr. Steve Miller - State
 - Mr. Chris King – Energy
 - Mr. Ed Hecker – USACE
 - Mr. Joel Szabat - MARAD
 - Mr. Paul Baumer – DOT
 - Mr. Michael Khouri – FMC
 - Dr. Holly Bamford – NOAA
 - Dr. Elaine Buckberg – Treasury
 - Mr. John Moran – MARAD
 - Mr. Neal Stolleman - Treasury
 - Mr. Glenn Boledovich – NOAA
 - Ms. Patricia Mutschler – CMTS/USACE
 - Ms. Liana James – CMTS

- **Welcome and Introductions**

- **Mr. Ivar Engan**, our host for the Cotton Club as well as the representative for Norway, welcomed everyone and provided a brief history of the Cotton Club.
 - The cotton club is an informal group comprised of the maritime attachés from approximately 19 embassies and the European Union. They meet on a monthly to exchange information and views on US maritime policy and legislative developments that

effect member countries. The group serves as an advisor to the Consultative Shipping Group, which from time to time raises specific issues with the US Administration and Congress. The Cotton Club first met on May 12, 1948 in a room at the old Dutch Embassy that closely resembled the room of a trade and commodity club in New York known as the Cotton Club. The Netherlands' shipping advisor, Van Hengel noted the similarity between the rooms – and the name stuck.

- **Ms. Helen Brohl**, The Executive Director of the CMTS provided a brief background of the CMTS and of the governance of marine transportation in the US.
- **Dr. Elaine Buckberg**, Deputy Assistant Secretary for Policy Coordination, Office of Economic Policy at the Department of the Treasury, provided some context for the discussion about infrastructure investment.
 - Infrastructure is a very high priority for the Obama administration. A reliable and efficient infrastructure is indispensable to a modern economy; we need to continually modernize and maintain our infrastructure.
 - Yet public infrastructure expenditures as a share of the economy have declined in recent decades, both for capital investment and for operations and maintenance.
 - The economic, social and environmental costs of not investing in our infrastructure can be massive.
 - According to the American Society for Civil Engineering, there is a need to invest about \$1 trillion between now and 2020 in surface transportation, water/wastewater, inland waterway and port infrastructure.
 - Well-prioritized investments in infrastructure are critical to expanding economic opportunity and fostering economic growth in the long-term.
 - Productive infrastructure investments also create jobs in the short term
 - There are a variety of ownership arrangements for infrastructure in the US.
 - Surface transportation is predominately publicly owned (e.g. roads and transit), as is social infrastructure
 - Energy and telecommunications infrastructure have long been privately owned.

- Ports are complex because there are both private and public aspects.
- The US has been relying on private funding for public infrastructure for decades through the municipal bond market, but this approach has limitations:
 - Municipal bonds do not attract tax-exempt investors; and
 - Existing tax law limits private equity participation in municipal bond-financed projects, which presents an obstacle for P3s.
- The Administration is focused on achieving Surface Transportation Reauthorization before May 31; while funds should last through July, uncertainty may cause state and local governments to curtail their investment plans during the prime summer construction season.
 - The Administration is proposing that about half of the almost \$480 Billion Surface Transportation Bill would be funded by one-time gains from Business Tax Reform.
- The Administration's Build America Initiative is designed to increase infrastructure investment by expanding the market for public private partnerships and putting federal credit programs to greater use.
 - The Administration recognizes that private investment is not a substitute for government spending on infrastructure, but that we can achieve better results by expanding the sources of investment and using those dollars as effectively as possible.
- The Build America Initiative was launched in July 2014, with three prongs:
 - The Department of Transportation's Build America Transportation Investment Center (BATIC), a one-stop shop for state and local governments, public and private developers, and investors seeking to use innovative financing;
 - The Infrastructure Investment summit hosted by the Department of Treasury and Department of Transportation September 9, 2014; and
 - The Build America Working Group, which was charged with promoting recommendations for actions over the next two years.

- The Recommendation Report from the Working Group was sent to the President last January; recommendations included:
 - Permanently establishing the Qualified Public Infrastructure Bonds (QPIBs) program. The QPIBs program would extend the benefits of municipal bonds to P3s, like partnerships that involve long-term leasing and management contracts, lowering the cost of borrowing and attracting new capital. Eligibility for QPIBs would require state or local government ownership of the project.
 - Establishing two new centers of excellence:
 - Water Finance Center, which is being developed by EPA, and which will work closely with municipal and state governments, utilities, and private sector partners to use federal grants to attract more private capital into projects; and
 - The US Department of Agriculture's Rural Opportunities Investment Initiative, which will identify opportunities for investment in promising rural water, energy, and broadband projects, and improve access to USDA credit programs.
 - The Report also encouraged the consideration of P3s as an alternative to conventional procurement for port infrastructure.
 - Since the market for P3s cannot readily be expanded without achieving successful risk allocation between public and private partners, the report also recommended that Treasury author a white paper on alternative contract incentive structures designed to achieve this goal. The paper was released last month (discussed below).
 - Separately, the Administration's budget includes a proposal for a National Infrastructure Bank to provide competitive financing of infrastructure projects across the transportation/water/energy sectors. 50% of the funding would have to come from non-federal sources (e.g. state, local, or private entities).

CMTS Round Table – P3 Activities (Helen Brohl, CMTS)

- **Dr. Holly Bamford**, Acting Assistant Secretary for Atmosphere and Conservation at the Department of Commerce (representing National Oceanographic and Atmospheric Administration – NOAA) provided some insight into her participation in the meeting. She was interested in hearing others' perspectives of on the role of P3s in building and sustaining port and maritime infrastructure.
 - Infrastructure is a significant CMTS priority.
 - NOAA is not involved in the business of building and sustaining such infrastructure. NOAA is home to the National Weather Service and conducts earth observations for weather and climate data forecasting.
 - NOAA takes a lot of ocean and oceanographic information in order to make better decisions for safe navigation. This includes building and maintaining the Nation's nautical charts; and real-time marine and coastal forecast services.
 - The Physical Oceanographic Real-Time System (PORTS) is a public private partnership where the Federal Government pays for the installation of the equipment and the local sponsor, such as a port authority, pays for the additional sensors.
 - In this day and age, there is a need for information infrastructure to aid in decision-making for what infrastructure to build, but also, how to maximize the use of existing infrastructure, "Can I fit my vessel under the bridge?"
 - NOAA has two established partnerships
 - (1) "Big Data"
 - According to a 2013 McKinsey Global Institute Report, open data could add more than \$3trillion in total value annually.
 - NOAA gathers 20 terabytes of data each day. That is twice the data of the entire printed collection of the US Library of Congress!
 - NOAA has a joint partnership among Amazon, Microsoft Azure, IBM, Google, and the Open Cloud Consortium to create five data alliances.

- This joint partnership is a new model for public-private collaboration aimed at bringing NOAA's vast data holdings to the public via the cloud, all with the intent to foster innovation and spur economic growth.
- This effort is intended to put government data to work to help solve problems in ways we can only imagine by enabling development of new and innovative products and services.
- (2) Precision Navigation
 - Specific to marine transportation – a project among NOAA, the Port of Long Beach, Jacobson Pilots and Charta Software (a Dutch company).
 - The project builds off the PORTS mentioned previously to provide a more well-rounded understanding of the environment to enhance transportation. It should allow the port to have discrete, accurate information for every vessel, including the ultra large crude carriers and containers ships.
- **Mr. Michael Khouri**, Commissioner of the Federal Maritime Commission explained the FMC's interests in the P3 discussions.
 - FMC is an organization focused on trade, economic development, and antitrust regulation of ships coming into and out of the United States. Ships and marine terminal operators are registered with FMC. FMC provides a forum and legal mechanism where disparate parties can come together to discuss topics with limited anti-trust protection.
 - FMC does not do much with P3's.
 - FMC just approved two different agreements
 - (1) One with the Ports of Los Angeles and Long Beach (combined 13 different terminals) FMC approved an amended agreement for these parties to talk and come up with commercial solutions to address the port congestion problems
 - (2) Pacific Ports Operating and Improvement Agreements –

- This agreement was for all ports on the West Coast, plus 15 different carriers, and chassis operators to come together to discuss commercial solutions to address the congestion issues. A big part of the problem is a need for infrastructure, particularly for the “first and last mile.”
- **Mr. Paul Baumer** is a Senior Advisor in the Office of Policy at the Department of Transportation. His discussion was focused on providing additional details about the Build America Transportation Infrastructure Center (BATIC), mentioned previously by Dr. Buckberg.
 - BATIC started as an Administration-wide initiative with a focus on transportation infrastructure, especially P3s.
 - It is a “one stop shop” at the DOT Secretary’s level so that the people that are working the specific projects, such as the States, local governments, port authorities, know where to come within the DOT for assistance.
 - The BATIC started as a central gathering place to promote the P3 model and provide technical assistance about specific projects.
 - The BATIC now brings the multi-modal programs together. The DOT has not always had a unified voice when it comes to maritime infrastructure. It is very important to make the DOT more comfortable with port infrastructure.
- **Mr. Joel Szabat**, the Executive Director at the Maritime Administration discussed MARAD’s interest and experience in P3’s and port financing.
 - Recent issues at the west coast ports have demonstrated there are serious bottlenecks at our ports.
 - The Federal Government has historically had a very limited role in financing ports. TIGER grants (Transportation Investment Generating Economic Recovery) have provided \$500 to \$600 million over six years and have leveraging an additional \$700 million in local funds for cross-cutting intermodal projects.
 - One out of every three ports needs at least \$100 million in capital to address infrastructure for vessels with deeper drafts or making connections with the inland waterways. There is over \$30 billion in unmet capital investment needs at US ports.
 - There are challenges to implementing P3’s

- P3s require a revenue stream.
- In the US, the governance structures of ports impact their ability to collect revenues. Ports are neither fully public nor fully private.
 - Most major ports are landlord ports – they do not operate the ports so only lease revenue is under their control and are set over much longer terms. Revenue from cargo flows are not under their control. Terminal operators pay fees for 20 to 30 year leases.
 - The Federal Government would need to partner with carriers, shippers, railroads, the local governments that use intermodal connectors to address investment deficiencies.
 - The best opportunity the Federal Government has for attracting private investment in port infrastructure is to leverage existing grant and credit (financing) programs that can absorb some of the higher risk, thereby mitigating some of the risk associated with maritime infrastructure.
- **Mr. Ed Hecker** is a Senior Advisor to the Deputy Commanding General for Civil and Emergency Operations at the US Army Corps of Engineers (USACE). He provided the attached information paper and explained the USACE role and interest in P3's.
 - USACE has a water resources infrastructure portfolio that ranges from inland and coastal navigation projects; to flood risk management projects including dams and levees, to multi-purpose projects that incorporate hydropower and in many cases environmental and natural resources projects.
 - There are approximately 3000 operational projects with a capital value of just under \$200B in the current USACE portfolio. The Federal budget is not growing and this is a major challenge that will require innovative funding, financing and delivery as well as culture change if USACE is to continue developing, maintaining and operating this extensive National infrastructure.

- Part of the culture change requires USACE to create a lifecycle portfolio management approach that addresses the portfolio as part of a watershed and water resources system, rather than as just individual projects.
- USACE is seeking to partner with non-Federal and private sector entities so that they can leverage the estimated \$5 billion per year that is budgeted for USACE water resources infrastructure with other state, local and private funding and financing in order to sustain performance, extend service life and buy down risk on the existing infrastructure, and to accelerate delivery of new infrastructure to reduce lifecycle costs and achieve earlier accrual of project benefits to the Nation.
- Stakeholders are dependent on reliable service to move product from inland to the ocean. For example, on the Illinois Waterway there are eight locks and dams that require critical maintenance and in some cases major rehabilitation. USACE is pursuing opportunities to use P3 structures that can engage potential revenue streams from partners and beneficiaries that have an interest in improving the reliability of the system, and complement available Federal funding to achieve our stated objectives. These structures can also be P4's (public-public-private partnerships).
- Currently, USACE has seven demonstration projects in development that span our business lines to determine how we can most effectively apply the P3/4 structures to our water resources infrastructure needs.
- **Mr. Christopher King**, Senior Advisor for Energy Policy and Systems Analysis at the Department of Energy discussed the Department of Energy's Quadrennial Energy Review. The phase of the QER focused on mid-stream infrastructure for energy transmission, storage and distribution.
 - Traditionally mid-stream infrastructure was pipes and wires – refineries and sub-stations, but not generation or end use. DOE expected that it would be simple to evaluate, however they did not anticipate the rapid change in usage of shared transport infrastructure – railroads, roadways and waterways.
 - Waterways have always played an important role in energy, but what has changed is the direction of flow.

For example, the transport of energy used to include the import of oil and the domestic movement of coal.

- However, coal use is on a decline. The commodity that is increasing, however, is Canadian and domestic production of oil.
 - The flow is now from the inland regions of the country to the coastal ports – either the Gulf Coast, which requires a significant amount of dredging, or the northwest to Seattle/Tacoma which is where North Dakota oil is sent by rail for export.
- Department of Energy began looking at the major energy ports. This shift has highlighted critical infrastructure needs and many opportunities for investment.
- Recommendations from the QER include:
 - Completion of a comprehensive multiagency study on waterborne energy movement including: modeling; projections of energy movements from inland to and from the coasts; and potential user fees (P3) in order to allocate costs to beneficiaries.
 - Actions to support energy transport systems, potentially including a TIGER-like grant program for energy infrastructure.
 - Chapter 5 of the QER discusses these recommendations in greater detail.
- **Mr. Stephen Miller**, Senior Advisor for Maritime and Land Transport, Department of State discussed his perspectives on infrastructure investment in the United States.
 - Although the State Department recognizes that there is an enormous need for infrastructure financing in the United States and other countries, they do not have a great deal of involvement in domestic infrastructure development. However, they do look at the International Development Banks to promote rigorous standards.
 - Traditionally, infrastructure has been regarded as a Government function until not too long ago. When the US talks to countries bilaterally and multilaterally, on trade in general a lot of countries are reluctant to commit to opening up their infrastructure development to foreign investment. There may be good reasons for this, but as policy makers consider this they

may want to also consider the need for adequate investment and expertise.

- **Dr. Elaine Buckberg** addressed specific Department of Treasury interests in public-private-partnerships.
 - The Department of the Treasury authored a White Paper that presents three alternative incentive structures for public-private partnerships. These risk and profit sharing approaches are designed to better align the interests of public sponsors and private investors than the basic user fee or availability payment models that have traditionally been used in public-private partnerships.
 - In the basic user fee system, the private partner in the P3 assumes all of the demand risk, because revenue directly depends on usage of the system; this option is not necessarily attractive to investors, especially for newly constructed projects where there is no history of usage on which to base demand projections.
 - In an availability payments model, the government makes fixed, recurring payments to the private partner as long as the asset meets quality standards; the government assumes all of the demand risk because payments must be made to the private partner even if usage is far below expectations.
 - The White Paper identifies three alternative options drawn from the regulation of privately owned energy and telecommunications infrastructure. These options will create choices that are more attractive to both private investors and project sponsors, by expanding the opportunities for profit and risk sharing.
 - These options will be attractive to state and local governments because project sponsors will be able to share in the project's upside potential if the project performs above expectations; and
 - These options will also be attractive to private investors because they will offer some protection against downside risk if usage of the infrastructure is below expectations.
 - International investment
 - Infrastructure investment is an attractive asset class for pension funds, both domestic and foreign, as well as for

insurance companies because the long maturity of cash flows match their liability profiles; returns have relatively low correlation with other asset classes, providing diversification opportunities; and cash flows are often stable.

- The recommendations delivered to the President in January also included broadening the availability of data on infrastructure investment returns; more transparent data will provide a benchmark that will inform private investment decisions and help to sustain investor interest.

Cotton Club Round Table – P3 Activities (Mr. Ivar Engan, Cotton Club)

- **Mr. Michel Wallemacq**, Embassy of Belgium discussed the Port of Antwerp Second Lock Waaslandhaven project as an example of a P3 project. (see attachment)
 - The construction of the second lock in Waasland Port – the dock complex on the left bank of the Scheldt in the Port of Antwerp- is to increase capacity for super Post-Panamax size vessels into the Port of Antwerp. Waasland Port is already accessible via the Kallo Lock. However, this has been in operation since 1979 and no longer caters for present-day needs. The new lock allows ships to travel from the Scheldt with its tidal activity to the port docks, where the water level is always as high.
 - **Kallo Lock**: operating since 1979, Kallo Lock is 360 metres long and 50 metres wide. Kallo Lock is the only one on the left bank of the Scheldt in the Port of Antwerp. Consequently, it is presently the sole inlet and outlet for vessels calling in at Waasland Port.
 - **Finance structure**

According to the Port Decree, the region is responsible for the construction and maintenance of basic infrastructure (e.g. locks). Flemish government is authorized by the Flemish parliament to establish an external autonomous agency in a private legal form named “Flemish Seaports public limited company” (NV Vlaamse Havens). NV Vlaamse Havens has the task to direct, coordinate and finalize the expansion of the maritime access ways to the Flemish ports, including Antwerp, by constructing (including the financing) new sea locks and

making them available for the port authorities. New locks will be constructed in the ports of Antwerp, Bruges and Gent.

- The cost of the second lock for Waasland Port is not being charged in full to the Flemish region. The Antwerp Port Authority is also involved in the co-financing. This is the first time this has happened for a lock. The creation of special purpose vehicle will facilitate the construction of sea locks in the port of Antwerp. For the construction of each sealock a separate daughter enterprise will be established by NV Vlaamse Havens – and these enterprises will make the new sealocks available for the port authorities.
- **Estimated cost price and investors**
The cost price for building the second lock in Waasland Port was put at Euro 382 million (please note that several figures co-exists). The European Investment Bank was to finance about 50% of the original construction cost, KBC bank a credit line of 81 mil euros and the balance split between the Antwerp Port Authority and the Flemish Government based upon in an advance agreed-upon allocation key.
- The Flemish Government will keep some of the rights to the soil and infrastructure (see chart annexed). The new private company is subcontracting to the Port of Antwerp the management of the lock against financial contribution.
- Joel Szabat, MARAD, pointed out the total cost of this one lock is equivalent to the TIGER grant investment in all US ports over the past 6 years!

<http://www.deurganckdoksuis.be/en>

<http://www.eib.org/infocentre/press/news/stories/2012-april-01/worlds-biggest-lock-at-the-port-of-antwerp.htm>

- **Mr. Ryan Naulty**, The Transportation Policy Advisor Global Issues Group, for the British Embassy discussed the United Kingdom's interest and experience in P3 implementation.
 - P3s are not just funding mechanisms for infrastructure projects. They represent a way of doing business.
 - Ports are very unique in that they are important infrastructure assets given that Britain is an island nation. There are 120 ports in the UK, most of which are privately operated.
 - The UK has focused on forming strong and strategic partnerships with the ports and all of the stakeholders involved

to identify the strategic needs where the Government can either assist or get out of the way.

- All rail in the UK is owned by a government corporation.
- Freight companies have licenses to operate on the rails but do not control the rails.
- Ports can be seen as a chokepoint in freight movement.
 - For the UK, it is about understanding what the port operators need. One challenge with road infrastructure is that since the highways are owned by a private government corporation, the government is a large stakeholder but not an owner. The government promises long term funding for five years at a time. The government will always have an influence in highway planning, but not the final say.
- Britain has moved away from evaluating individual projects to a more overall, or systems approach.
 - They look at the strategic value, the economic impact, the environmental impact and decide where to focus.
 - Much of that focus has been on the infrastructure around ports, including raising the Merson Bridge to make it high enough for ships to pass. This is where the government can get involved – not specifically the ports – but things around the ports that can help alleviate chokepoint issues.
- **Dr. Stephan Zass**, Counselor Transportation, Digital Infrastructure and Building for the Embassy of the Federal Republic of Germany discussed Germany's perspective on P3's.
 - Germany has done both P3s and privatization of assets.
 - Currently, Germany is looking to privatization of the highway system. P3's for some highways are already on the way. They have already privatized rail and air traffic control.
 - Waterways and locks are still publically held. But there are significant bottlenecks on the locks on some of the inland waterways.

- There is a modernization process underway funded through public funds and user fees, however it will take time to fully implement.
 - There is a successful project at an inland port near Dusseldorf, which is run by the city itself. The port has been converted to 50% private operators and 50% city council.
 - It is now making a profit, which has allowed it to modernize.
 - It is expanding and is regarded as a successful P3 project.
 - Sharing the investment risk is probably needed in order to attract investors so that the private investors are not accepting all of the potential risk of the project.
 - In Germany there are not many P3 projects in ports. Ports are mostly looking to privatize. This does not mean that the government is not involved, since it may be a government owned enterprise.
- **Mr. David Batchelor**, European Commission Representative from the European Union discussed the EU perspective on P3s.
 - The EC Representative's position is funded through a P3. One-third from the European Commission; one-third from the EuroControl (European Organization for the Safety of Air Navigation); and one-third from the private sector.
 - The European Commission sits within the European Union to create new regulations and enforce laws and regulations.
 - The European Commission has a seven year budget timeline that they enforce.
 - The current budget is for 26.25 billion euros over 7 years.
 - The European Union does not own or operate any infrastructure but instead assists the member states.
 - The EU focus is on cross-border transportation. Connecting European markets – “motorways of the seas” – encourage modal shift from trucks to ship.
 - The EC/EU assists member states in looking for gaps between members.
 - The key priorities include
 - Rail information systems
 - Motorways of the Seas

- River Information Systems
 - Managed by annual calls
 - Financing is through either a grant or a contribution to a European Investment Bank.
 - Co-Financing will be between 30 and 50 percent, depending on the type of project.
- **Mr. Yoshiro Taguchi**, Transportation Counselor at the Embassy of Japan addressed Japan's views of infrastructure financing.
 - Between 1970 and 1987 the economy was booming and Japan placed a strong focus on transportation investments.
 - After the boom years, the Government created government corporations that could borrow from the private sector to finance rail, road and airport projects.
 - In order to repay the loans, the Government could choose to either raise fees or raise taxes. They chose to raise user fees since the infrastructure functions as a monopoly.
 - Users in Japan complained about the highway and railway fees and the government owned corporations faced competition from other Asian companies.
 - Japan chose to privatize the railway system in 1987 to develop the land and services.
 - A government company was established to construct and maintain the new high-speed rail system.
 - The rails were leased private rail companies for operations.
 - There are 99 Airports which are constructed by the Federal Government. To increase performance, there will be concession contracts for the operations valued at \$10-15 billion.
 - Ports are owned by a Government Corporation, but there are many operators in the same port. In order to avoid competition among the operators, the Government increased the grant funding to a new Public-Private Corporation for construction of new infrastructure. The operators were the owners of the Corporation. The Government mandated that the new facility be leased to the

new corporation to streamline operations and reduce costs.

- **Mr. Bart deJong**, who is currently the head of the Unit for Maritime Shipping and Security in the Ministry of Infrastructure and the Environment for the Netherlands spoke on behalf of the Embassy of the Kingdom of the Netherlands.
 - The Netherlands has one executing agency that is responsible for infrastructure investment. It has been experimenting in the past decade with P3s, mostly for roads and locks.
 - There is a Center of Excellence that has a government to government agreement with the US Army Corps of Engineers.
 - Port of Rotterdam has a P3 project with limited Federal involvement for an 1100 hectare expansion.
 - The project will cost 1 billion euros and the partnership is between the Port Authority and private investment.
 - It will be financed through the central budget and there will be no user fees.
 - The Netherlands uses P3 as a system to generate private finance.
- **Mr Ivar Engan**, Maritime Counselor at the Embassy of Norway discussed Norway's implementation of P3's
 - Norway has a large public sector.
 - In the 1980's and early 1990 more private companies were established to take over functions traditionally performed by the public sector. The conservative party is more positive towards P3s.
 - Norwegian roads are not the best in the EU. It is difficult and expensive to build roads in a mountainous country.
 - There was a project in southern Norway a few years ago to construct 10 miles of road using a P3 mechanism.
 - The private company was tasked to build the road and maintain the road for two decades.
 - Financing – Norway has not had a lot of trouble with finances due to successful energy and maritime sectors
 - 3% of everything generated from the energy sector is used for operating expenses and the remaining 97% goes to the sovereign wealth fund.
 - Norway owns approximately 1% of all US stock
 - There are three maritime projects of interest

- The Norwegian Ship owners association – Trade Ministry secretariat for the Norwegian fleet
 - Norway is the sixth largest shipping nation in the world
 - Norway was involved with the US and others in the removal of Syrian chemical weapons

Meeting Adjourned

ATTACHMENTS



US Army Corps of Engineers

As of 4 May 2015

Alternative Financing and Public Private Partnerships (P3)

- The Corps is exploring alternative financing approaches to deliver resilient, reliable and sustainable water resources infrastructure for existing authorized projects that will help solve national infrastructure challenges across the Corps:
 - Sustain performance, extend service life, and/or buy down risk for the nation for existing infrastructure
 - Accelerate delivery of new infrastructure to reduce life cycle costs and achieve earlier accrual of project benefits to the nation
- The Corps has over 3,000 operational projects include channels, ports, dams, levees, and project sites that the Corps planned, constructed and continues to operate and maintain. These projects provide an annual return of roughly \$27B to the treasury and \$87B in overall net economic benefits to the Nation. Two other factors that help illustrate why additional investment, whether through alternative financing or more traditional means, is crucial for the nation right now:
 - The demands for maintenance, operations and capital investments are growing
 - The Corps is experiencing negative performance trends (unscheduled lock outages, peak hydropower availability, flood risk in face of climate change) across a diverse portfolio
- Five different Alternative Financing lines of operation are being worked concurrently. They are contributed funds; public private partnerships (P3); Water Infrastructure Finance and Innovation Act; Divestiture; and Energy Saving Performance Contracts.
- USACE is exploring alternative financing including P3s in several demonstration projects across the nation using existing authorities. These demonstration projects are enabling us to better understand the options in

different mission areas to determine the feasibility of using P3 concepts and tools in the context of those authorized and existing projects.

- Seven demonstration projects are being evaluated for these opportunities.
 - Our demonstration efforts indicate that the application of P3s to complex Civil Works infrastructure is very project specific, more amenable to tailored approaches by business line than global one-size-fits-all solutions (i.e. a P3 structure that works for Flood Risk Management is different from one for navigation, and both are different than hydro).
- Questions? Please contact Ms. Pauline Thorndike, Pauline.d.thorndike@usace.army.mil, ph: 202.761.7552, or Mr. Ed Hecker, Edward.j.hecker@usace.army.mil, ph: 703.428.9042

