

## COMMENTS FROM INDUSTRY REPRESENTATIVES ON THE FLORIDA HIGH SPEED RAIL PROGRAM

### **BACKGROUND AND INTRODUCTION**

*On December 2-4, 2009, the Florida Department of Transportation (FDOT) held meetings with individual entities that expressed an interest in providing comments and input on the Florida High Speed Rail (HSR) program. These meetings followed the Industry Forum held by FDOT on December 2 to brief all interested parties on the applications made to the federal government for HSR funding. The forum was attended by approximately 500 individuals.*

*The list of entities with which individual meetings occurred from 12-2 to 12-4 follows:*

- 1- FCC/Globalvia - Spanish concessionaire/HSR constructor*
- 2- Fluor Daniel – with Balfour Beatty, Lane Construction and Hubbard – Concessionaire/HSR constructors and previous FL HSR proposer*
- 3- OHL – Spanish concessionaire/HSR constructor, and GE Transportation (recent MOU with Chinese on HSR)*
- 4- SNCF – French HSR operator and developer*
- 5- Washington Group/URS- major US contractor/engineer*
- 6- Bombardier – HSR Technology provider based in Canada with major US presence*
- 7- Global Rail/Korean Rail – previous Florida HSR proposer with contingent from Korea High Speed Rail*
- 8- ACS/Dragados – Spanish concessionaire/ HSR constructor*
- 9- Granite/Skanska- major US contractors*
- 10- Bechtel – major US & international contractor*
- 11- Kiewit – major US contractor*
- 12- Kawasaki – Japanese HSR Technology provider with major US presence*
- 13- Central Japan Railroad – Japanese HSR operator/developer*
- 14- Sumitomo – Japanese HSR supplier, large US presence*
- 15- Siemens – German HSR Technology supplier, large US presence*

## **FORMAT OF DOCUMENT**

*For each individual meeting, FDOT prepared a list of major topics for which input was being sought. The Format of this document consists of a listing of the topics presented by FDOT, followed by the comments from industry.*

*IMPORTANT: this document is intended to provide a generic summary of comments received from industry – it is not intended as a guidance or recommendation document.*

## **PROCUREMENT STRATEGY**

- 1- FDOT's Track 2 Application includes a procurement strategy with the following approach:
  - Design-Build for Civil package, generally including all elements below the rail;
  - Public Private Partnership for design and construction of core system elements, rolling stock, and long term operations and maintenance

Is this an attractive strategy for your company/team?

What advantages/disadvantages do you anticipate with this approach?

What other approach(es) to procurement would you recommend (must be compliant with ARRA Track 2 requirements)?

- 2- The Track 2 Application envisions a similar yet separate set of procurements for the Orlando-Miami corridor (from the Tampa-Orlando Corridor). This poses the possibility of differing solutions on various aspects of the Florida High Speed Rail Program from one corridor (Tampa-Orlando) to the other (Orlando-Miami), which would be undesirable.

What advice do you have for FDOT to address the compatibility between both corridors, understanding that the Orlando-Miami corridor will lag Tampa-Orlando procurements by at least two years?

- 3- Should FDOT consider procuring an operator separately and independent from other contracts?

## **SUMMARY OF COMMENTS FROM INDUSTRY**

*This was the most discussed topic and had a wide range of ideas and input from industry.*

### **Major comments:**

- *While industry understands and agree that the current approach (DB Civil package followed by P3) will create most jobs in the short term, there is no escaping a need for FDOT to have to*

*manage the integration risk between the two major contracts (i.e. long term acceptance of each others' work). This is a significant issue.*

- The current approach has been used around the world and can work. The key to making it work is having early involvement and overlap of the core systems entity and the operator. Integration must be addressed from the early stages or the risks of re-doing work are large. The issuance of the second contract early is highly desirable to reduce the integration risk. The system in Korea used this two-step approach without planning for proper integration and had substantial re-do of work that was a public relations challenge as well as being costly.*
- The integration risk between the two separate contracts is one that some entities would be willing to assume or share with FDOT if they are brought in early enough into the process.*
- Putting a major DB Civil Package out soon will be advantageous for pricing due to the current competitive environment – prices may escalate in the next couple of years.*
- Several entities stated that it is challenging to prepare and team appropriately for this HSR program due to the lack of certainty on the procurement approach. While they recognize that several factors (e.g. funding decisions by FRA early next year) influence the final procurement approach, they pleaded for key decisions to be made and communicated as soon as possible.*

*List of suggestions (some of these could be grouped, others are mutually exclusive):*

- Use a turnkey approach with all work in one large P3 contract for DBOM&F which would resolve the integration risk issue for FDOT (it is still there but is within the P3 team) – the downside of this approach is that there is acknowledgment this will take much longer to get under contract due to complexity of the deal (although one entity thought it was feasible to have this approach and achieve closing by October 2010).*
- Some entities stated they were only interested if this was procured as an all-in turnkey P3 or DBOM&F contract. Others were interested in the current approach and would focus on the DB Civil package or the core systems exclusively. The remainder would respond and adapt to whatever procurement approach FDOT decides on.*
- One entity recommended a full scale partnership from inception in which the experienced HSR developer/operator is brought on and helps to implement all aspects of the HSR system. The*

- risk/reward balance of this model was not clear, and the selection process FDOT would use also seemed a hurdle for this approach.*
- Some entities recommended that FDOT bring as many elements as possible of the second contract into the first one to minimize integration risk, e.g. track, systems, catenary foundations, etc. Other entities, with a similar goal of minimizing integration risk, recommended that FDOT try to incorporate as many elements in the latter contract as possible. Generally these recommendations fit the comfort area/expertise of the entity making them.*
  - Issue an “early works” contract with items such as clearing and grubbing, barrier work, utility relocations, site prep, etc. that could best take advantage of being shovel-ready, and buy more time to prepare a single P3 contract.*
  - Consider a single “performance-based” all-in contract with less prescriptive requirements in order to advance the process quickly. This could be done based on train speed or service requirements as examples.*
  - In the event the split remains as currently planned (DB for the Civil Package, P3 for rest) consider splitting the long term maintenance into two components where the Civil Package has its own long term maintenance contract.*
  - If the split remains, have a “Design Integration” task, or a Task Force with the specific purpose of coordinating the separate packages.*
  - If there is a way to issue an early NTP for the P3 contract for Design Integration, this would be desirable.*
  - Have extremely tight specifications on the Civil Package and have the P3 contractor accept the work based on standard or extended warranties by the Civil contractor*
  - Have the entire team that is involved in advancing the work under one roof – Owner, consultants, contractors. This will give the best opportunity to catch integration and other coordination items.*
  - Allow one-on-one team meetings as “private” meetings*
  - Use of stipends will limit contingencies and save the state money in the long run. One team recommended a \$5 million stipend for the DB Civil package.*
  - The “Maximum Price” approach used by FDOT on procurements would not be recommended on this large a project. If necessary, structure bid options to manage a situation in which there is a hard limit on dollars for a particular contract.*
  - Consider for the P3 having a two part contract with separate closings – one for civil components, one for remaining elements.*
  - Shortlist 3 or 4 max. Criteria for selection should include similar large project experience. Some entities thought experience did*

*not necessarily have to be with high speed rail, while others felt this was critical.*

- *There were a few unique procurement approaches offered for consideration, including a “progressive” design-build approach and an approach where two entities are selected and paid to advance the design to a certain point before final pricing is submitted and a decision is made to move forward with one of them.*

#### FINANCING/COSTS

- 4- FDOT’s current approach to financing the Florida High Speed Rail Program generally divides funding as follows: public funding for all civil elements, core systems, rights of way, and possibly rolling stock; private funding for long term operations, maintenance and capital asset renewals. Revenues from system ridership will go to the private entity up to a certain threshold, after which some profit sharing arrangement or other expansion strategy is agreed to. No ridership revenue guarantee will be provided by the State.

Is this financing attractive based on the ridership anticipated per the Track 2 Application forecast?

Do you have an alternative financing strategy(ies) that minimizes State funding and is attractive to the private sector?

- 5- The Track 2 Application includes cost estimates broken into unit price items.

To the extent it is appropriate for you to do so (within the range of your expertise and knowledge of Florida market), please offer commentary on pricing that would be helpful to FDOT.

- 6- Under what circumstances (if relevant) would your firm/company be an equity participant in the Florida HSR program?

#### ***SUMMARY OF COMMENTS FROM INDUSTRY***

*The assumption as shown in FDOT’s application is that the lion’s share of the capital costs for infrastructure will be borne by the public sector, and this is the financial model of most systems around the world. The real discussion then, focused around how any gaps in public funding (examples may include: some portion of infrastructure; rolling stock; long term O&M; and, capital asset renewals) would be structured. While there were varying opinions on this, there were certain patterns that stuck out from industry:*

- *FDOT's model of availability payments for large P3's is commonly used for HSR systems and would be most acceptable. In this model, some level of ridership revenue could be part of the financing structure.*
- *While there was an entity or two that would be willing to accept full ridership revenue risk to cover O&M costs from inception, the strong consensus was that this would not result in the best deal for the State due to high risk. The pure "ridership risk" model was more viable a few years ago, yet the world's financial crisis has made this approach less acceptable to the private sector, and the return that would be required would be larger than in years past.*
- *Several entities would be willing to put equity into the deal, yet this may be expensive in the current credit environment, and the costs would need to be recovered in the deal somehow.*
- *The assumption of ridership risk (for those willing to entertain it) would not only add cost to the program, it would also require a substantial effort from private entities during procurement to perform their own independent forecasts.*
- *The Orlando-Miami corridor is clearly the "plum" contract and there is much less reservation about the risk of that segment being a successful HSR service.*

*Specific comments/suggestions:*

- *Milestone payments for the capital infrastructure components should be considered.*
- *FDOT should perform an investment grade ridership update*
- *A "right of first refusal" on the Orlando-Miami segment can make the financing of the P3 for Tampa-Orlando one in which entities are more willing to assume higher ridership risk.*
- *The role of FDOT in the determination of "captive market" deals, as well as their timing, should be clearly specified in the process so that vendors can more accurately determine what this could mean for revenue estimation.*
- *Consider development rights along the median corridor, e.g. fiber optics or other utilities may pay for lease rights.*

*Opinions on Capital costs included in the Track 2 Applications:*

- *As one might expect, there was much hesitation in giving strong opinions on costs. Having said that, there were a few entities that said pricing looked reasonable. None of the entities expressed grave concerns about the pricing shown. Several stated they would follow up after they had a chance to study in more detail.*

## IMPLEMENTATION SCHEDULE

- 7- The Track 2 Application includes Implementation Schedules for Tampa-Orlando and for Orlando-Miami

While FDOT recognizes the schedules are aggressive, we would appreciate candid input on achieving different elements of the work. FDOT also wants to be sure to allow reasonable timeframes for RFP development and review. Please offer comments/input on schedule

### ***SUMMARY OF COMMENTS FROM INDUSTRY***

*Many comments on this were tied to the procurement approach. General sense was that the DB Civil Package schedule, while aggressive, was achievable. The strongest comments were on the procurement and testing of rolling stock, where many entities expressed concern about the schedule shown, and suggested FDOT consider how to advance this in the process.*

#### *Suggestions/comments:*

- The Right-of-way acquisition process should be expedited for remaining parcels to remove uncertainties and nail down the alignment and maintenance facility locations.*
- Approvals from client are critical to the process, particularly across District lines. Highly recommend empowerment of decision makers to expedite approvals.*
- "Business as usual" approach to advancing work (approvals, etc.) will not be successful – this requires dedicated attention.*
- It would be better to not have such an aggressive schedule to manage expectations as the process advances.*
- Assign a "Decision Making Guru" to make sure decisions are made quickly to keep work moving along.*
- In order to expedite the procurement of vehicles (which is perhaps the biggest schedule concern) one idea for FDOT to consider is "Piggybacking" on an order from other Owners around the world.*
- While many/most thought schedule was aggressive, all entities seemed comfortable that revenue service could begin well within the ARRA deadline for Track 2 of Fall 2017.*

## STATIONS/INTERCONNECTIVITY

- 8- The Track 2 Applications include potential station locations for both Corridors. FDOT would like input on the following:

What part of the stations would you recommend be constructed with DB Civil Package, if any?

Stations offer potential development and revenue opportunities that must be determined through business arrangements with station location owners and other stakeholders.

What role do you anticipate/recommend for proposers in this dialogue?

Should proposers have input on final station location where options exist?

FDOT has identified current or future Interconnectivity opportunities with other modes at most stations. How important is each of these to you as a proposer?

### **SUMMARY OF COMMENTS FROM INDUSTRY**

- *While Associated Development/TOD at stations is recognized as a significant revenue source, it is too speculative at this time to be part of the project's finances.*
- *One consortium's approach is going to be highly dependent on an approach that will include development rights. By using this approach, they would be willing to assume ridership revenue risk.*
- *Many vendors noted that all around the World, stations attract development.*
- *Several entities expressed the importance of having well functioning stations on the day the system is open for revenue service.*
- *The determination of the location of the Lakeland station should be expedited by FDOT.*
- *The flow of passengers and timing from station to destination is critical to the experience that passengers have, and in turn making a HSR service attractive.*
- *One entity suggested State should consider developing the stations and associated TOD themselves as the entity best suited to do so. Another suggested that the vendor should be allowed to work directly with station owners.*
- *FDOT should consider an approach in which a cost allowance per station, with minimum requirements to be met, is included in the procurement documents. This would allow proposing entities to individualize their approach to stations if they want to go above the minimum requirements, while leveling the playing field and ensuring a functional system.*

## TECHNOLOGY

- 9- The Track 2 Application and the FEIS were prepared assuming the use of steel wheel on rail HSR technology common in Europe and the Orient. FDOT has made it clear that while this is the basis for the Application, other technologies are welcome to propose so long as they can provide the same proven performance.

What advice do you have for FDOT on achieving this goal of open technology acceptance and proven performance?

### ***SUMMARY OF COMMENTS FROM INDUSTRY***

*Strong consensus in every single meeting: steel wheel/steel rail is the only viable solution for a proven and reliable service. Just as important as making this decision about steel wheel/steel rail is to make it soon, as it drives so many other aspects of the program. Note that this recommendation came just as strongly from the non-technology entities as from those with commercial interest in this outcome. It seemed inconceivable to many to have a credible program unless and until this decision is made.*

#### *Specific comments or suggestions:*

- *There are a limited number of vendors for HSR technology, with most of those being providers of steel wheel/steel rail technology. What will be best for the State is to create an environment that will be most attractive for all of these steel wheel/steel rail providers to maximize the competitiveness.*
- *Selection of a Technology should be done for both corridors (Tampa-Orlando and Orlando-Miami). While there is no doubt that the vendor selected for first corridor would have a competitive advantage for the second corridor, the sense is this could be structured in a way that would attract competition for both corridors by competing vendors.*
- *Manufacturing/Buy America: all technology vendors acknowledged this, and it is apparent that most are looking aggressively at strategies to manufacture domestically.*
  - *GE Transportation has a facility in Melbourne, FL that they could use as part of their strategy of joint development with China;*
  - *Siemens has a manufacturing facility in Sacramento*
  - *Kawasaki has a manufacturing facility in Nebraska and an assembly plant in New York*

- *Korean Rail is associated with Hyundai/Rotem and Hyundai has manufacturing facilities in the US.*
- *Many/most technology vendors are having ongoing discussions with FRA (One even mentioned ongoing discussions and a big role in technology by the General Accountability Office – GAO) on technology development and implementation for Tier V (over 150mph). All feel that FRA will work with us on accepted technologies from around the world.*
- *Several reminded FDOT of the safety of HSR Technology – Japanese noted 45 years without a single fatality.*

#### RISK MANAGEMENT/LEGAL

10- The size of the contracts envisioned for this Program are potentially very large (\$1 billion plus). What concerns if any would you see with this size of contract for a HSR project in Florida?

11- As you are aware, FDOT is planning the use of the highway median for the HSR service between Tampa and Orlando, and some form of use of highway rights of way in the Orlando-Miami corridor as well. From a risk management stand-point, are you comfortable with addressing the safety and liability requirements that this environment brings?

12- Are there any Legislative impediments you see on advancing the Florida High Speed Rail program?

13- What are the largest risks you believe FDOT needs to address in order to make this an attractive system for you to propose on?

#### **SUMMARY OF COMMENTS FROM INDUSTRY**

- *Size of contracts not a problem for industry, yet they will seek same relief on bonding that FDOT has applied on other P3's (providing less than 100%)*
- *Several entities recommended that FDOT mobilize some significant efforts quickly to limit contingencies, particularly on the Civil Package. Some advancement of design in key elements that are riskier in terms of pricing will save the State money. This is another reason for making an expedited decision on the Technology (e.g. conceptual structures can be advanced based on International Standards for steel-wheel/steel rail once the decision is made).*
- *Permitting risk should be removed as much as possible from schedule by the State.*

- *Size of contracts will limit competition to some degree, yet this will be overcome by the need to sub-contract work and the advantage gained in lowering risk by having one overall entity responsible.*
- *None of the entities had concern with the size of the DB Civil package other than comments on the bonding requirements.*
- *Use of highway median, while not ideal for HSR geometry, is very manageable. One contractor anticipated this approach would require much rework of I-4, while other contractors thought the median work could be done with minimal/no disruption or rework to I-4.*
- *One consortium was going to investigate some alternative alignment strategies that could improve speed while recognizing the trade-offs (impacts to the FEIS) that would exist in terms of using the available right-of-way.*
- *If the DB Civil package is broken into more than one contract, it should be a maximum of two or three sections.*
- *Clear allocation of risks between public and private entities is critical to manage risk and minimize contingencies.*