# 21<sup>st</sup> Century Global Collaboration

Design and Development Team Collaboration Worldwide

## **Summary**

The following represents a synopsis of the content for the presentation to the 20<sup>th</sup> Conference of Structural Engineers of Argentina, to be held in Buenos Aires on 15-17 October 2008. The program for the presentation will include a visual presentation, discussion of relevant issues related to design collaboration, discussion of Case Studies and a response to participant queries.

#### A. Introduction

- 1. Objectives
- 2. Overview of Issues
- 3. Relevance to 21<sup>st</sup> Century Opportunities
  - a. Evolution of world economy
  - b. Diversity of opportunities
  - c. Balance with Domestic Development activity
  - d. Firm Growth and global positioning

#### B. International Engagement - Issues For Consideration

- 1. Development Issues
  - a. Program, Scope and Size
  - b. Maturity of Markets and Demand
  - c. Financial Objectives
  - d. Time
  - e. Social and Cultural Influences
  - f. Design Quality
  - g. Sustainability
  - h. Funding Strategy
  - i. Prelet, Presales Program
- 2. Financial Issues
  - a. Project Budget
  - b. Sources of Funding
  - c. Fees and Expenses
  - d. Travel and Subsistence
  - e. Payments and Collections
  - f. Taxes, Duties, other Business Costs
- 3. Legal and Contractual Issues
  - a. Professional Practice requirements
  - b. Licensing
  - c. Contracts, Forms of Agreement
  - d. Insurance requirements
  - e. Limits of Liability

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- 4. Organizational Issues
  - a. Who is the Client?
  - b. Development Team structure
  - c. Design Team structure
  - d. Specialist Design requirements
  - e. Agents, Enablers, Handlers
  - f. Coordination and Design Management
  - g. Project Schedule
  - h. Preconstruction Services
  - i. Construction Services

### 5. Operational Issues

- a. Project Process
- b. Team Interaction and Integration
- c. Communications System and Management
- d. Document Management
- e. "Official Project language"
- f. Translation requirements
- g. IT/CAD functionality, systems and standards
- h. Meetings and Presentations
- i. Coordination and Management
- 6. Design and Technical Issues
  - a. Design Quality program
  - b. Quality Assurance program
  - c. Codes, Standards and Regulatory requirements
  - d. Material Standards
  - e. Material Technologies
  - f. Availability of Systems
  - g. Availability of qualified labor

#### C. Project Specific Considerations

1. Issues unique to Case Studies presented below

#### D. Case Studies – a profile of collaborative models used on past projects

- 1. North America Dearborn Center, Chicago
- 2. Asia Korean Airlines Operations Center, Seoul
- 3. Europe Broadgate, London
- 4. Asia Jin Mao Tower, Shanghai
- 5. Europe Vila Olimpica, Barcelona
- 6. Middle East Dubai Airport
- 7. Europe Merchant Square, London

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- 8. Saudi Arabia University Projects
- 9. North America The Chicago Spire, Chicago
- 10. Other New Pursuits Istanbul, St. Petersburg, Emirates, Warsaw
- E. Conclusions, Key Issues and Recommendations
- F. Comments and Discussion

**Exhibits – Images of Case Studies** 

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