

Bombardier Transportation

Construction Summit Istanbul

Shezad Salim Head of Sales & Business Development Rail Control Solutions October 22, 2020



G Our BT mission

Making reliable, safe, and sustainable transport available for all in a world of urban growth and digital change"

(extract from mission from Bombardier Transportation website)

Our theme

Strategic rail technology partner to cities around the world



Partner to over **200** cities in the world



Moving **500** million passengers a day



More than 100,000 train cars in service on

~**70,000** km of track



61 engineering and

production sites in **27** countries



36,050⁽¹⁾

employees from **119** nationalities



Transportation **pioneer** using its entrepreneurial spirit since **1942**

(1) Including 950 inactive employees as at December 31, 2019

EKN / SEK / Business Sweden partnership

- Long term cooperation >> first project in Istanbul 1985
- Successful financing of railway and mass transit projects in Turkey and Africa
- New opportunities together with Bombardier and partners in Turkey, Africa and Asia









Bombardier in Turkey

- Adana light rail transit system
- Ankara Metro
- Eskişehir light rail transit
- Istanbul
 - Yenikapi-Havalimani-Kirazli (M1)
 - Metrokent-Olimpyat-Kirazli (M3)
 - Topkapı Sultançiftliği (T4)
 - Üskudar-Ümranye-Çekmekoy (M5)
 - Kabataş-Mecidiyeköy-Mahmutbey (M7)
 - Dudullu-Bostanci (M8)
- **Izmir** light rail transit system





KONTROL MERKEZ

Yapi Merkezi – long-term cooperation

Cooperation since 1986

- First projects in Istanbul and Izmir
- Three ERTMS¹ Level 1 rail control / signalling projects for major mainline corridors in Turkey, Algeria and Ethiopia

Recent international projects

- Ethiopia Wayside ERTMS Level 1 mainline signalling and onboard equipment for locomotives / 375 km
 > Financing via Swedish ECA, EKN and Swedish Export Credit, SEK
- Algeria Wayside ERTMS Level 1 mainline rail control / 21 km
- Tanzania Wayside ERTMS Level 2 mainline signalling and onboard equipment for locomotives / 532 km





BOMBARDIER





^{1 –} European Rail Traffic Management System

Latest: Dar es Salaam-Morogoro & Morogoro-Makutupora, Tanzania

INTERFLO 450 ERTMS Level 2 mainline rail control solutions





Signed: June 2019

Financing: EKN/SEK and EKF, Denmark

Customer: Yapi Merkezi (responsible for design and delivery)

Scope:

205-km Dar es Salaam-Morogoro 336-km Morogoro-Makutupora projects

- First two sections of new central freight / passenger corridor
- Part of 5-year national rail modernisation programme
- First 160 km/hr, ERTMS Level 2-equipped rail connections in East Africa
- Increasing standardisation, expansion of freight networks and connections with ports

Significance:

- Providing safe, efficient & reliable rail systems
- Promoting trade, development & mobility across Tanzania and beyond
- Bombardier entry into East Africa's fast-growing rail market

Ongoing collaboration with EKN/SEK with opportunities in Africa

New opportunities

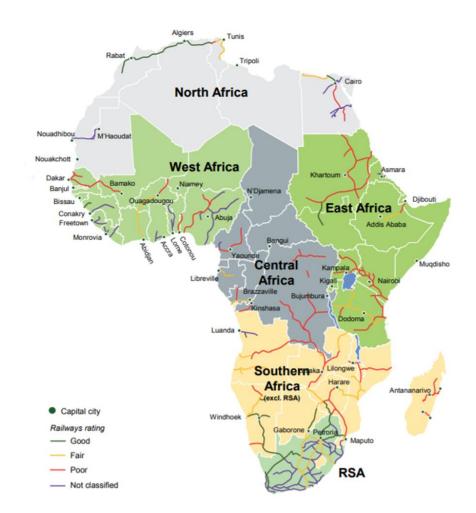
- West Africa
- East Africa
- Southern Africa

Challenges

Financial status of the African countries

Customer support

- Bombardier support customer to find best ECA financing
- Cooperation with sourcing companies in Scandinavia



Looking ahead - railway and mass transit projects favoured



- Proposed transformation of the Swedish Export strategy
- Focus on Climate & Social Development railway and mass transit projects a priority
- Opportunity for the new railway business for Bombardier





Questions & answers



Thank you very much!

Shezad Salim Head of Sales & Business Development Rail Control Solutions October 22, 2020