Aptis, Alstom’s Electric Bus

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A drastic need to reduce congestion

Source: the International Sustainable Solutions (ISS) for the International Sustainable Institute (ISI)
Seattle-based not-for-profit designed to bring world-wide sustainability to the Puget Sound.
A drastic way to reduce congestion

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Images of downtown Seattle’s 2nd Avenue

From the International Sustainability Institute’s Commuter Toolkit poster
A drastic way to reduce congestion

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We need to be able to anticipate needs and satisfy them... to sustainable mobility providers.
What is Aptis?

Electrified bus + APTIS = More than an electric bus
How’s conventional transit bus?

- Classic doors
- Only partial low floor
- Interior capacity limited to around 75 passengers
- Very limited mobility in rear end of the bus
- Close rear end, no visibility
How’s conventional transit bus?

- Motor equipment inside of the bus
- Chassis and wheels condition interiorism
- >60% of weight in rear axle forces double wheels
- Tubular structure, feeble

Interiorism is conditioned by the bus architecture
What does Aptis bring to transit buses?

- 2 or 3 double doors (1,3 m) opening to the outside
- FULL flat floor of 20m²
- Up to 95 passengers, 4 PRM, 2 wheelchairs or more…
- Panoramic windows, 20% of additional glass surface

Very high comfort level: accessibility, dynamic interior flow, luminosity, wide interiors
What does Aptis bring to transit buses?

- All equipment on a flat roof, freeing interior design
- FULL flat floor, allowing different interior arrangements
- Wheels in the ends, largest distance between axles
- Up to 3 double doors in either side
- Very robust architecture, endurance

Disruptive, but well proven, architecture
Differentiators: mobility

- 4 steering wheels
- Saving of up to 25% of urban surface
- Short distance wheel-front end: less stress for driver
- Low curve radius, better insertion

- Minimum space needed for approximation
- Assistance to stop.
- Perfect allignment with stop, minimum dwell time, maximum accessibility.

A leap forward in urban mobility
Differentiators: mobility

Parking of classical Urban bus
Differentiators: mobility
Technical features - Accessibility
Technical features – Interior movements

Wide aisle for swift mobility
Technical features - 4 type of seats (95 passengers - 6.5 T payload)

5 priority seats

6 panoramic seats

2 places for wheelchairs

Conventional seats

Allows carrying up to 95 passengers, fully accessible
Technical features – PMR places
Technical features – full flat floor make cleaning easier

20 m² of flat door – Increased maintainability
Technical features – maximum comfort for standard seats

Wide and luminous for an enhanced passenger experience

20% of extra window surface
Technical features – panoramic seats in the rear

Full transparent rear: 6 seats in vis-a-vis configuration
Aptis, premio a la innovación en el Salón Busworld en 2017