The Six Key Pillars of i-Size

Improved Performance
- Modern dummy & New Criteria
- Side Impact

Better adjustment to Children
- Classification using Child Size
- RF 15 Months Mandatory

Better Compatibility with Cars
- Isofix Integral Universal
- Better Compatibility
The Six Key Pillars of i-Size

- Modern dummy & New Criteria
- Classification using Child Size
- Isofix Integral Universal
- Side Impact
- RF 15 Months Mandatory
- Better Compatibility
New Dummies & Performance Criteria

- In addition to Chest Acceleration:
  - Head Acceleration
  - HPC
- Neck Load Monitored
- Missing Abdomen protection
The Six Key Pillars of i-Size

- Modern dummy & New Criteria
- Classification using Child Size
- Isofix Integral Universal
- Side Impact
- RF 15 Months Mandatory
- Better Compatibility

Informal document GRSP-55-37 (55th GRSP, 19 – 23 May 2013, agenda item 18)
Casimir Child Accident Study

% Child Fatalities

206 killed

Door intrusion

Key Loading parameter

Head injuries preeminent
R95 Side Worst Case

FF Front Seat

R 129 Side Impact

Head injuries preeminent
The Six Key Pillars of i-Size

Modern dummy & New Criteria

Classification using Child Size

Isofix Integral Universal

Side Impact

RF 15 Months Mandatory

Better Compatibility
Better protect Head and Neck for the Youngest: RF 15 months mandatory
Classification using Child Size

- Better Fitment of the Child in the Seat
The Six Key Pillars of i-Size

- Modern dummy & New Criteria
- Isofix Integral Universal
- Classification using Child Size
- RF 15 Months Mandatory
- Side Impact
- Better Compatibility
Isofix integral universal

Isofix CRS

2 Lower Isofix anchorages + 1 anti rotation device

Universal FF
Semi – Universal
RF (Isofix R44)

Universal (i-Size)

Top Tether

Support Leg

Semi – Universal (Isofix R44)

Universal (i-Size)

Informal document GRSP-55-37 (55th GRSP, 19 – 23 May 2013, agenda item 18)
Isofix Seating Position in car

Isofix integral universal

F2X envelope + Top tether
i-Size Seating Position in car

- R2 envelope
- F2X envelope
- Top tether
- Support leg
Strength and Geometrical requirement for better compatibility with cars

$F = 8 \text{ kN}$

Point X

max. 125mm
The Six Key Pillars of i-Size

- Modern dummy & New Criteria
- Classification using Child Size
- Isofix Integral Universal
- Side Impact
- RF 15 Months Mandatory
- Better Compatibility
Better Compatibility

- Backward compatibility

Car Fitting List
RF or SL
Regulation 129 is an important improvement for Child Safety

- **Ease of use for consumers:**
  - Size classification
  - Better compatibility with cars with Plug and Play solutions

- **Better Child protection**
  - Side Impact
  - Longer rearward facing requirement
  - Modern dummy and more relevant criteria.