



ENPC
European Nursery Products Confederation


CHILD RESTRAINT SYSTEM
I-SIZE STANDARD

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Regulation 129: Enhanced Child Restraint Systems
Benefits for Consumers

ANEC

Raising Standards for Consumers




ICRT
INTERNATIONAL CONSUMER RESEARCH & TESTING

The European
Umbrella for
Comparative Testing




ANEC

The European
Consumer Voice in
Standardisation



Consumers International
The global voice for consumers

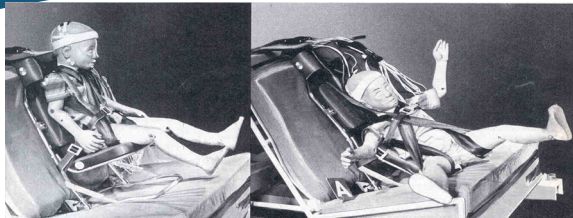


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Raising Standards for Consumers



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INTRODUCTION



Consumer groups historically test CRS:

- Consumer information (steering market)
- Influence Regulations

Big achievements, but:

Still room for improvement



Raising Standards for Consumers



INTRODUCTION

**Car manufacturers and CRS
manufacturers have a shared
responsibility for the safe transport
of children**



Raising Standards for Consumers



INTRODUCTION

Current situation:

- Children up to 1.35m / 1.50m must be transported in a R44 approved CRS.
- Relatively low number of fatalities
- Concerns on misuse rates



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Current Situation

Main concerns on R44 raised in GRSP

- **No** side impact (only frontal)
- Forward facing from 9 kg onward
- Classification difficult to understand -> misuse (universal solutions not very universal)

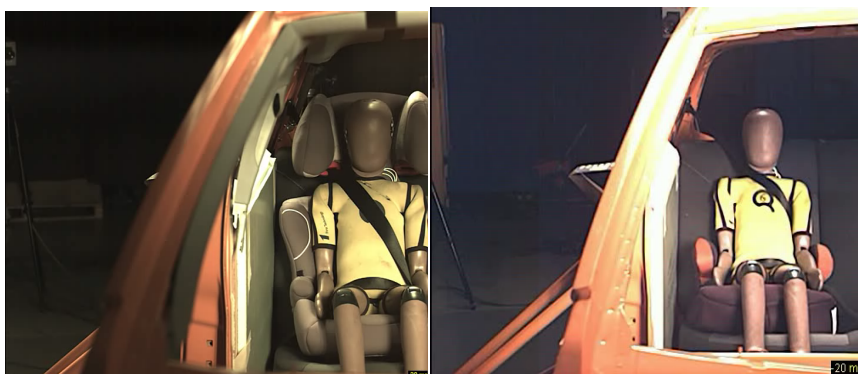


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Current Situation

Consumer tests (ETC) encourage side protection



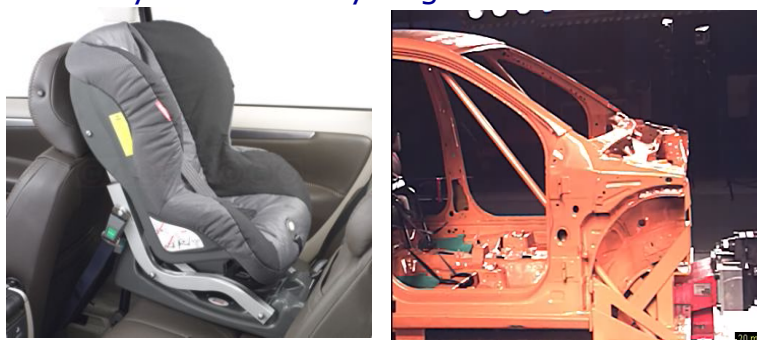
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Current Situation

Consumer groups encourage longer RWF transport

Not really facilitated by Regulation 44



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Current Situation

Check when buying:

- ECE 44 approval label
- Correct mass group
- Fits in your car(s)



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Current Situation

Table 1
Table of vehicle handbook information on child restraint systems
installation suitability for various seating positions

Mass Group	Seating position (or other site)				
	Front passenger	Rear outboard	Rear centre	Intermediate outboard	Intermediate centre
Group 0 up to 10 kg					
Group 0+ up to 13 kg					
Group I 9 to 18 kg					
Group II 15 to 25 kg					
Group III 22 to 36 kg					



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Current Situation

various ISOFIX positions

Mass Group	Size class	Fixture	Vehicle ISOFIX positions					
			Front passenger	Rear outboard	Rear centre	Intermediate outboard	Intermediate centre	Other sites
carrycot	F	ISO/L1						
	G	ISO/L2						
0 – up to 10 Kg		(1)						
	E	ISO/R1						
0+ – up to 13 kg		(1)						
	E	ISO/R1						
	D	ISO/R2						
	C	ISO/R3						
I – 9 to 18 kg		(1)						
	D	ISO/R2						
	C	ISO/R3						
	B	ISO/F2						
	B1	ISO/F2X						
	A	ISO/F3						
II – 15 to 25 kg		(1)						
III – 22 to 36 kg		(1)						



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Current Situation

Megane II (3+5) 08/02	② ③ ④ ⑤	Altea Fraerback (Facelit 2008)	2007	② ③
Megane II (3+5) 2008	② ③	Altea XL 2008	② ③	
Megane III Grandtour 06/09	② ③	Exeo 2009	② ③ ④ ⑤	
Megane III CC (2) 06/10	② ③	Exeo 2009	② ③	
Modus 06/04	② ③	Exeo (Facelit) 12/11	② ③	
Modus (Facelit) 2008	② ③	Ibiza (BK) 1993	② ③	
Scenic II 2003	② ③ ④ ⑤	Ibiza 2002	② ③	
Scenic II (Facelit) 2006	② ③ ④ ⑤	Ibiza (BL) (Facelit 2006)	② ③	
Scenic III 2009	② ③ ④ ⑤	Ibiza (SL) 2008	② ③	
Traffic II Phase 1 2001	③ ④	Ibiza (1P) 2010	② ③	
Traffic II Phase 2 (Facelit 2007) 2008	③ ④	Leon 2005	② ③	
Traffic II Phase 3 07/10	③ ④	Leon (3+5) 05/12	② ③	
Twingo 1998	② ③ ④ ⑤	Mi (3+5) 2011	② ③	
Twingo II 2008	② ③ ④ ⑤	Mi (5) 05/12	② ③	
Vel Satis (Facelit 2005) 2002	② ③	Mi (baugleich VW Up) 1999	② ③	
ZOE 10/12	② ③ ④ ⑤	Toledo M1 2004	② ③	
ZOE 05/13	② ③ ④ ⑤	Toledo 05/12	② ③	
SAAB		SKODA		
9-3 Sportcombi 2005	② ③	Cligo (baugleich VW Up) 2011	② ③	
9-3 Sportcombi 2007	② ③	Cligo (3+5) 06/12	② ③	
9-3 Sportcombi 2010	② ③	Facila I (Facelit 2004) 1999	② ③	
SEAT		Facila II 2007	② ③	
Ahambra (Facelit) 2005	② ③ ④ ⑤	Facila II Combi (SL) 08/10	② ③	
Ahambra (7N) 10/10	② ③ ④ ⑤			
Altea 2004	② ③			




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Current Situation



Group 0+ (<13kg)



Confusing info on age equivalent:

Manufacturer A: <15 months



Manufacturer B: <18 months

Current Situation

Interface issues:

- Insufficient belt length
- Poor belt geometry
- Interaction with car interior

Current Situation

Low Isofix awareness:

- 1% ISOFIX CRS in cars seen,
- >45% of cars is equipped with isofix attachment points.
- 20% drivers know ISOFIX

(CEDRE study, 419 children in 177 cars, aug 08 – jul 09, France)



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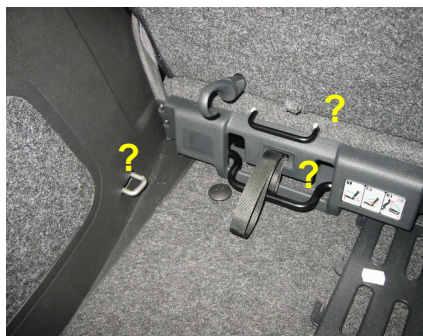
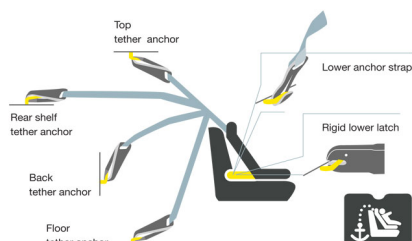


Current Situation

Top tether

high mis- and non-use rates

WHERE CAR SEAT TETHERS ATTACH



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Current Situation



Support leg
luggage compartment



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Regulation 129

Phase 1: integral isofix systems
(I-SIZE)



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i-Size

Improvements compared to R44:

1. Rearward facing mandatory up to 15 months *minimally*
2. Introduction of side impact test procedure
3. Reduced risk of incorrect installation
4. Stature based classification
5. Improved car-CRS interface
6. State of the art test tools



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i-Size

- Stature based classification
- Range to be determined by CRS manufacturer



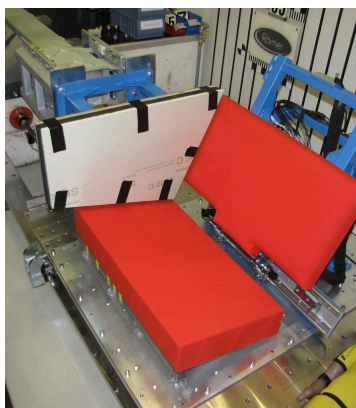
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i-Size

Improved protection:

- Side impact test (intruding door)



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i-Size

Improved protection:

- Rearward facing transport at least till 15 months



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i-Size

Increased universality

- **any** i-size CRS can be used on **any** i-Size seating position in a car



- IMPROVED CAR

INTERFACE!

(appreciate OICA cooperation)



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i-Size: **voluntary** for OEM's

Euro NCAP:

- Increased attention for car-CRS interface
- Credits for i-Size ready seating positions
- So far encouraging findings, to be fed into regulatory discussions

- [Demo](#)



Fair G0/1 in Renault Captur



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R-129 – next steps

Phased introduction from 2013 onward

- **Phase 1: isofix CRS, integral harness (i-Size)**
- **Phase 2: non integral CRS (2015 -2016)**
- **Phase 3: belted integral CRS (2015 - 2016)**



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R-129 – next steps

Phase 2 and 3, belted non integral CRS and belted integral CRS:

- Stature based classification
- frontal and side performance requirements
- **NO** 'i-size'



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Phase 2: non integral CRS

Phase 2, non integral CRS

(isofix optional):

- Universal booster seat
(<135cm, backrest +sidewings)
- Universal booster
(>135, side protection by car)



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Communication to consumers

Challenges:

- Bridging transitional period – for both cars and CRS
- Raise awareness on new Regulation
- Avoid confusion



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Communication to consumers

From ANEC perspective:

- I-Size: the next generation, but don't dismiss R44!
- Emphasise improvements on usability and safety
- Information needed on use in 'old style' R16 approved cars



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Communication to consumers

Issue:

- Only few I-size ready labelled seating positions in cars available in the early stages

-> in practise: when it fits in a car, it can be used in old style 'semi-universal' positions (support leg)



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Communication to consumers

Issue:

- EU Seat Belt Wearing Directive allows only R44 CRS, and cannot be modified in time.

->EC: i-size regulation can be considered as an improvement of R44. EC will communicate this in a 'Commission Interpretation' if necessary



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Communication to consumers

Issue:

- for some time two different regimes for CRS approval (mass vs stature based) are operational alongside each other

-> keep transitional period short



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Communication to consumers

Consumer program ETC will publish test results on i-size CRS as soon as feasible.



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