OBJECTIVES VS GOALS
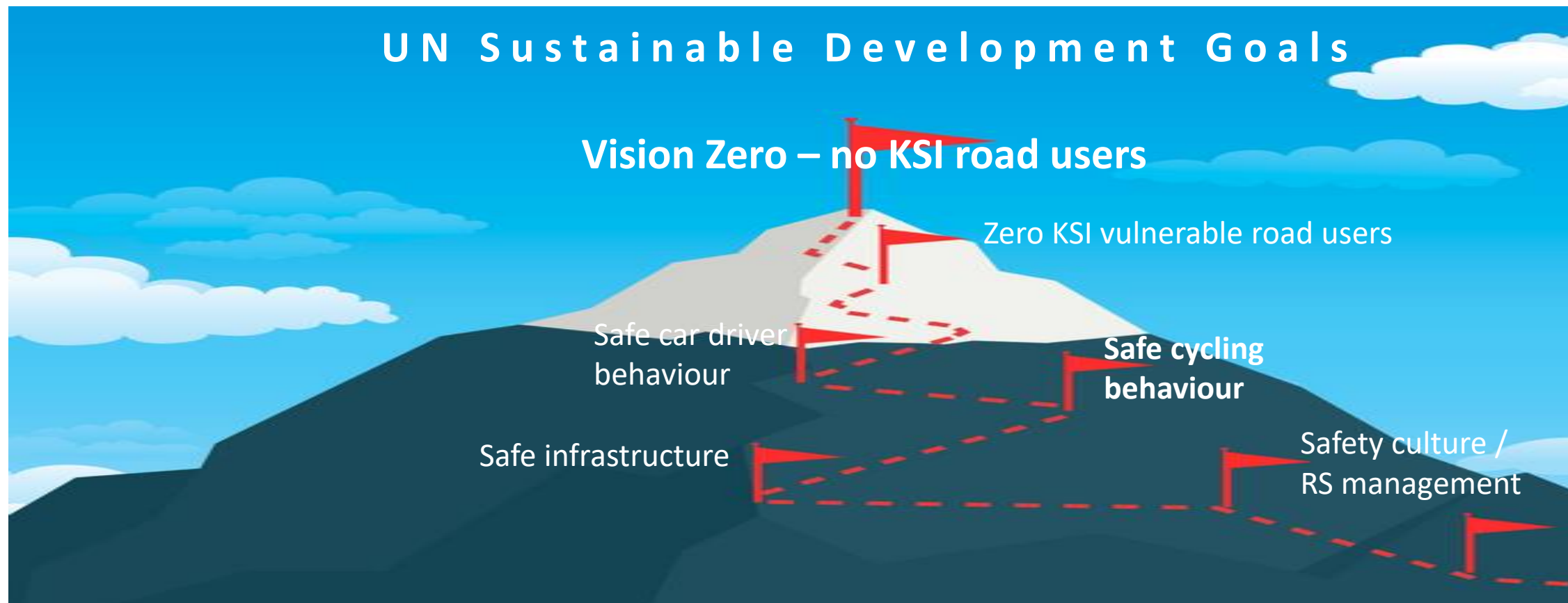
Goals

- Indicate overall destination
- Broad scope
- Mostly long-term
- Overarching, holistic
- Often intangible
- Hard to measure

Objectives

- Indicate specific steps to reach goal
- Narrower scope
- Medium to short-term
- Smaller parts in a larger strategy
- Tangible
- Measurable

Goal

Objective 5

Objective 4

Objective 3

Objective 2

Objective 1

Strategy

OBJECTIVES VS GOALS

Goals

- Indicate overall destination
- Broad scope
- Mostly long-term
- Overarching, holistic
- Often intangible
- Hard to measure

Safe cycling behaviour

Safe attitudes

Risk awareness

Higher-level skills

Road rules

Strategy

Basic skills

Objectives

- Indicate specific steps to reach goal
- Narrower scope
- Medium to short-term
- Smaller parts in a larger strategy
- Tangible
- Measurable

THE BROADER PERSPECTIVE

UN Sustainable Development Goals

Vision Zero – no KSI road users

Zero KSI vulnerable road users

Safe car driver behaviour

Safe cycling behaviour

Safe infrastructure

Safety culture / RS management

SETTING OBJECTIVES: EXAMPLE

Integrated teaching methods "Pedestrians" and "Cyclists" (VSV, Flanders)
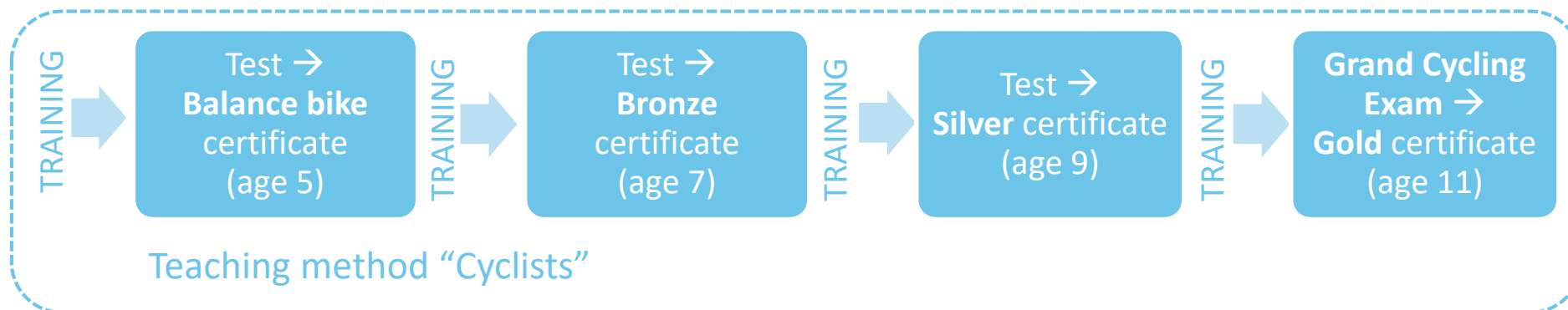
- For pedestrian and cyclist education in kindergarten and primary schools
    - *age 3/4 → age 11/12*
- Based on **attainment levels** for traffic education set by Flemish government
- Graduated method, step-by-step learning process
- **Operational objectives** related to **skills** (+ knowledge + attitudes) for each phase in learning process
- **Traffic certificates** per grade
    - *Pedestrians: Bronze (age 5), Silver (age 7), Gold (age 9)*
    - *Cyclists: Balance bike (age 5), Bronze (age 7), Silver (age 9), Gold (age 11)*
- Including two exams
    - ***Grand Pedestrian Exam*** *→ Gold pedestrian certificate (age 9)*
    - ***Grand Cycling Exam*** *→ Gold cyclist certificate (age 11)*

SETTING OBJECTIVES: EXAMPLE

Integrated teaching methods "Pedestrians" and "Cyclists"
for kindergarten and primary schools

TRAINING → Test → **Bronze** certificate (age 5) → **TRAINING** → Test → **Silver** certificate (age 7) → **TRAINING** → **Grand Pedestrian Exam** → **Gold** certificate (age 9)

Teaching method "Pedestrians"

TRAINING → Test → **Balance bike** certificate (age 5) → **TRAINING** → Test → **Bronze** certificate (age 7) → **TRAINING** → Test → **Silver** certificate (age 9) → **TRAINING** → **Grand Cycling Exam** → **Gold** certificate (age 11)

Teaching method "Cyclists"

SOME BACKGROUND

Attainment levels and development goals in Flemish education system – general:

- Mandatory knowledge and skills per grade, defined by government
  = what pupils need to know and be able to do when completing a grade

- Attainment levels: minimum objectives related to
  knowledge, insight, skills, attitudes

! Schools must work towards reaching attainment levels (mandatory)
  BUT schools are free to determine lesson content and teaching methods

Attainment levels for traffic education (primary school)

"At completion of primary school, pupils must:

- be able to locate dangerous traffic situations in wider school environment
- have sufficient responsiveness, balance, sense of coordination,
  and know traffic rules for cyclists and pedestrians,
  to be able to move independently and safely along a familiar route
- show willingness to consider other road users in their behaviour (…)"

SOME BACKGROUND

Number of casualties according to age and transport type, Flanders, 2019

Age	Pedestrians	Cyclists	Mopeds	Motorcyclists	Passenger cars	LGVs	HGVs	Bus / coach	Other / unknown	TOTAL
0-3 jaar	37	24			182	5		4	5	257
4-5 jaar	54	30			113	2	1		4	204
6-11 jaar	145	246	8	4	385	11	1	9	10	819
12-15 jaar	126	730	27	6	176	12	1	9	13	1.100
16-17 jaar	73	381	557	14	142	7		5	18	1.197

Source: Statistics Belgium / Graph: Department of Mobility and Public Works

RECOMMENDATIONS & EXAMPLES

RECOMMENDATIONS

EXAMPLE: PEDESTRIAN AND CYCLING CERTIFICATES

What the manual says

How we do it

RECOMMENDATIONS & EXAMPLES

RECOMMENDATIONS

- Link your activity to...
  - *Your general strategy*
    - E.g. casualty reduction in road users > providing education

  - *The school curriculum (if applicable)*

  - *The national goals for traffic safety and mobility education (if applicable)*

EXAMPLE: PEDESTRIAN AND CYCLING CERTIFICATES

- *Strategy: **lowering casualties** in young pedestrians and cyclists by providing **teaching method** for schools (+ educational tools & support)*

- *Linked to **curriculum elements** defined by school networks (public schools, private schools,...)*

- *Linked to **attainment levels** for traffic education in primary schools*

LEARN!
LEVERAGING EDUCATION TO
ADVANCE ROAD SAFETY NOW!

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RECOMMENDATIONS & EXAMPLES

RECOMMENDATIONS

- Decide whether learning outcome is related to
  - *actual behaviour*
  - *intentions to engage in the behaviour*

EXAMPLE: PEDESTRIAN AND CYCLING CERTIFICATES

- Learning outcome is related to **actual behaviour** of pedestrians and cyclists
- Actual behaviour is **tested** in various conditions according to level, e.g.:
  - *Bronze pedestrian certificate: test in protected environment (school playground,…)*
  - *Silver pedestrian certificate: test in real traffic conditions under adult supervision*
  - *Gold pedestrian certificate: test in real traffic conditions, adults as observers*

RECOMMENDATIONS & EXAMPLES

RECOMMENDATIONS

- Decide whether learning outcomes are related to
  - *knowledge (e.g. road rules, risks,…)*
  - *skills (e.g. crossing an intersection)*
  - *attitudes (e.g. towards risky behaviour)*
  (or combination of the above)

- Link the outcomes with a theoretical model of behaviour

EXAMPLE: PEDESTRIAN AND CYCLING CERTIFICATES

- Learning outcomes are related to **practical skills** for pedestrians and cyclists, defined according to level (bronze, silver, gold)
  - *Skills integrate practical application of **knowledge** (e.g. applying correct road rules) and **attitudes** (e.g. choosing safest option in risky conditions - insufficient view)*
- Theoretical framework = experiential learning theory (Kolb) + elements from motivational psychology

RECOMMENDATIONS & EXAMPLES

RECOMMENDATIONS

- Formulate outcomes in terms of **operational objectives**
  - *Define what elements specifically you want to change, to what extent and in what timeframe*
- Operational objectives should be **SMARTER** (Specific, Measurable, Achievable, Realistic, Time-bound, Evaluated, and Revisable)
- Operational objectives are a **road map** for designing your activity and its evaluation

EXAMPLE: PEDESTRIAN AND CYCLING CERTIFICATES

- Operational objectives are the **specific skills** needed to succeed the tests / exams (bronze, silver, gold certificates)
  - *Timeframe = lessons and practical training sessions leading up to the test / exam*
- Examples of SMARTER objectives: **skills and subskills** for Grand Pedestrian and Grand Cycling Exams (see next slides)
- Tests/exams serve as **milestones** in VSV's integrated teaching method for pedestrians and cyclists age 4-12

OPERATIONAL OBJECTIVES - EXAMPLE

Grand Pedestrian Exam:
specific skills needed to succeed the exam

- Recognize dangerous situations and respond safely
- Choose a safe part of the road to walk on if there is no footpath
- Walk left on the roadway if there is no footpath, hard shoulder, or bike path
- Walk on the roadway along an obstacle that completely blocks the footpath
- Cross the road safely:
  - *on a zebra crossing without a traffic supervisor*
  - *on a zebra crossing with an authorized traffic supervisor*
  - *at the safest place on the roadway (not between parked cars, not in a bend,…)*
  - *at an intersection without a zebra crossing*
  - *at an intersection with traffic lights*
  - *at an intersection with a traffic officer*
- (Cross at a level crossing)

Each operational objective is defined as a **set of subskills**

OPERATIONAL OBJECTIVES - EXAMPLE

Subdivision of skills to "cross the road at the safest place"

❌ = errors noted by the observer

The pupil...	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
chooses a place with good visibility - Not in a bend - Not between parked cars - Not near entries/exits - Not near obstacles	❌														
stops at the kerb	❌						❌								
looks left and right several times			❌			❌									
crosses perpendicular to the road if the road is free		❌						❌							
keeps looking out while crossing	❌							❌							
keeps his/her pace without running					❌										
behaves safely (does not take risks)															

OPERATIONAL OBJECTIVES - EXAMPLE

Grand Cycling Exam:
specific skills needed to succeed the exam

- Look over the shoulder while staying on course
- Extend one's arm to announce a maneuver or change of direction
- Turn right
- Turn left
- Cycle past an obstacle
- Take into account pedestrians on a zebra crossing
- Take into account passengers getting out of a car
- Take into account oncoming traffic and traffic approaching from the rear
- Cycle to a zebra crossing, get off and cross on foot
- Use a cycle path where required
- Cycle on the right side of the roadway if there is no cycle path
- Give way where required

Each operational objective is defined as a **set of subskills**

OPERATIONAL OBJECTIVES - EXAMPLE

Subdivision of skills to "cycle on the right side of the roadway"

❌ = errors noted by the observer

The pupil...	1	2	3	4	5	6	7	8	9	10
cycles on the right side of the roadway, at sufficient distance from parked cars	❌									
does not cut off bends does not take bends too wide		❌		❌				❌		
only moves to the left if there is an obstacle or when overtaking another cyclist			❌		❌		❌		❌	
behaves safely (does not take risks)	❌								❌	

RECOMMENDATIONS & EXAMPLES

RECOMMENDATIONS

- Formulate **output objectives**
  - *E.g. amount of pupils / percentage of schools you want to reach within a certain time period*

EXAMPLE: PEDESTRIAN AND CYCLING CERTIFICATES

- Flemish primary schools count about 70,000 pupils per grade
- Based on that number, VSV has defined output objectives for the Grand Pedestrian and Grand Cycling exams
  - *Per school year, at least 25,000 pupils should take the Grand Pedestrian Exam*
  - *Another 25,000 should take the Grand Cycling Exam*
  - *This corresponds to 35% of all pupils in those particular grades*
- The long-term aim is to reach 100% of pupils in Flemish primary schools

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THANK YOU!

werner.dedobbeleer@vsv.be

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