

OUTBREAK

3C Technical Document

● SOMMAIRE

- BIG PICTURE

- CHARACTER

- Gameplay
- Mechanics
- Parameters

- CAMERAS

- Main Camera
- Contextual Cameras
- Camera effects

- CONTROLS

● BIG PICTURE

Goal : Reach the eye of the cyclone.

Synopsis

The player chases the tornadoes and tries to uncover the secret of the most mythical of her.

To reach it, he will have to tame the storm and propel himself into his heart.

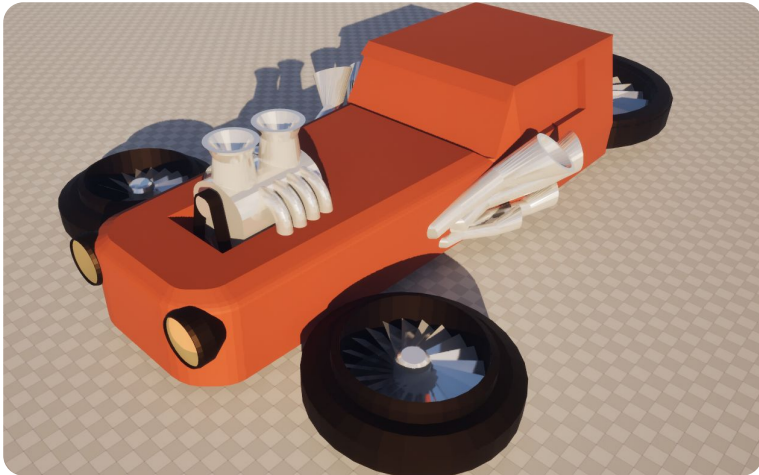
Features

The vehicle can drift, manage its acceleration and use side boosters to adjust its positioning.

Tornadoes attract, propel in their direction of rotation and into the air if the player approaches too close.

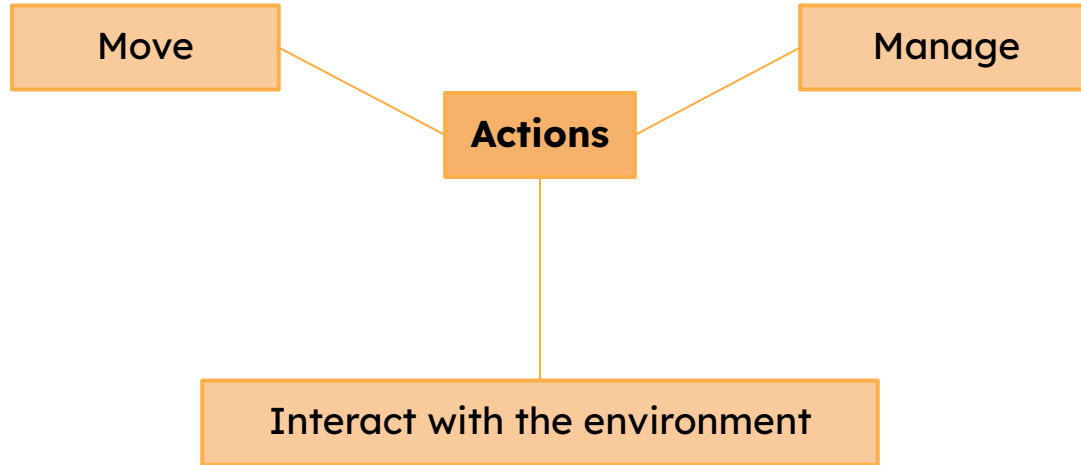
● CHARACTER

A flying hot rod called “drifter”
hovering over the ground with
turbines.

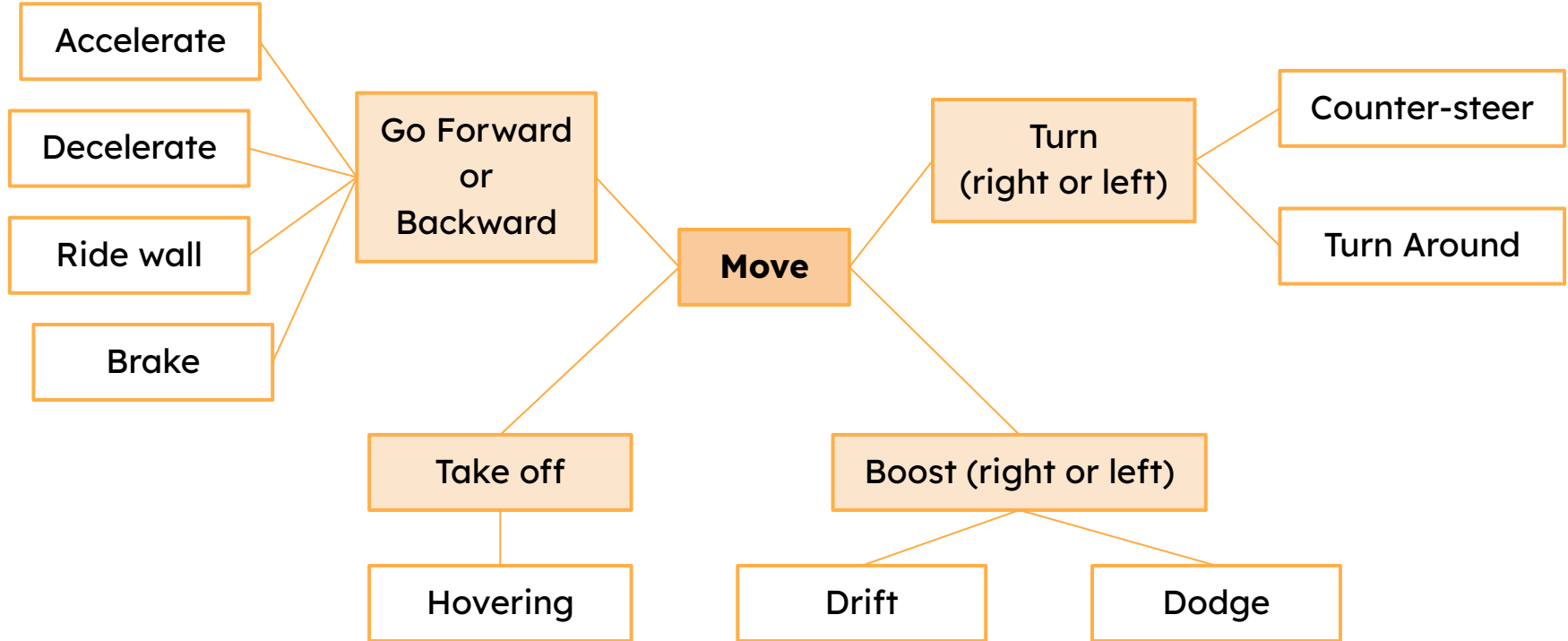


It can **accelerate**, **turn** and
brake.
It also has **lateral boosters** that
can allow it to avoid obstacles
or **drift**.

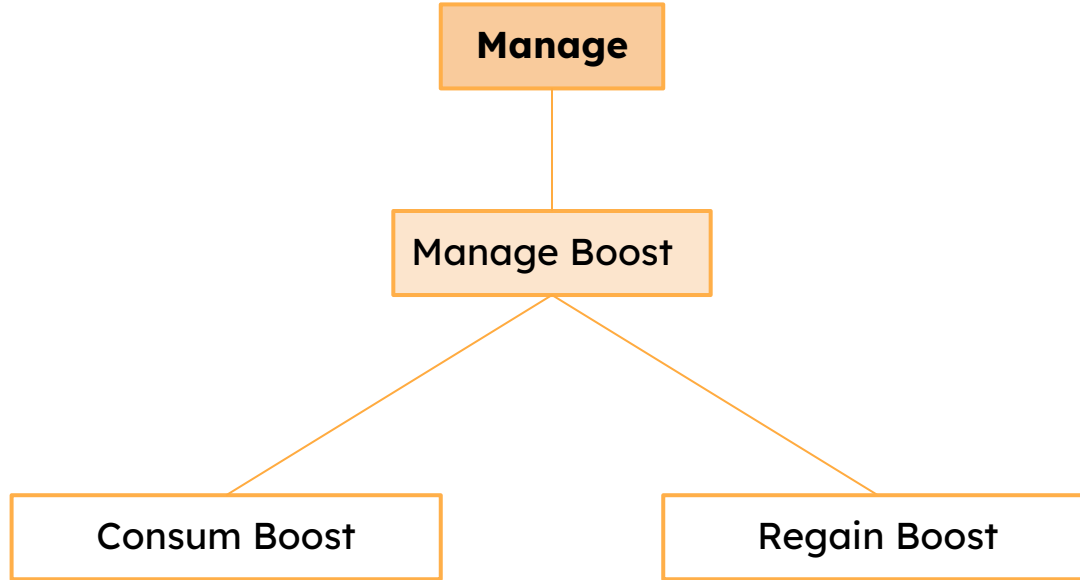
● CHARACTER : GAMEPLAY



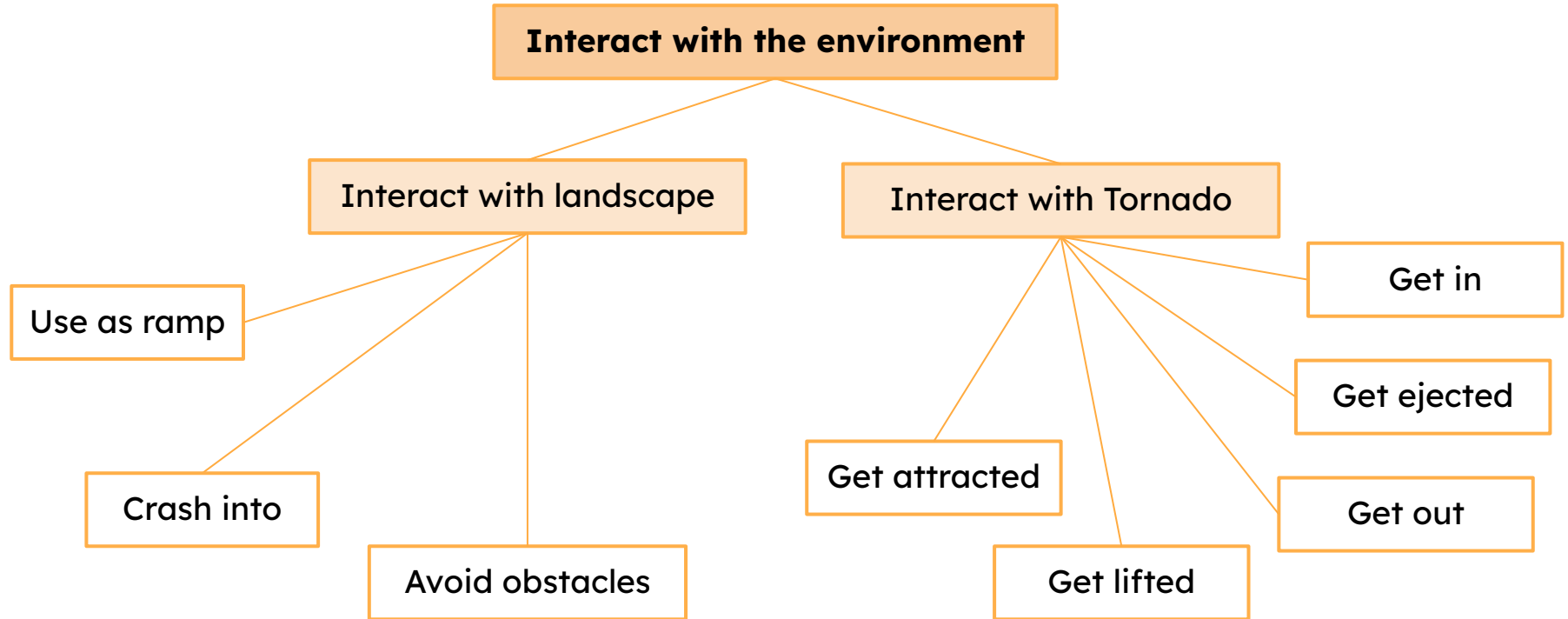
● ... : MECHANICS & PARAMETERS



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● CHARACTER : ACCELERATE

Inertia : yes (air & ground)

Air drag : 2

Ground drag (interp speed) : 0,2

Lateral boost power : 50 000

Boost max : 100

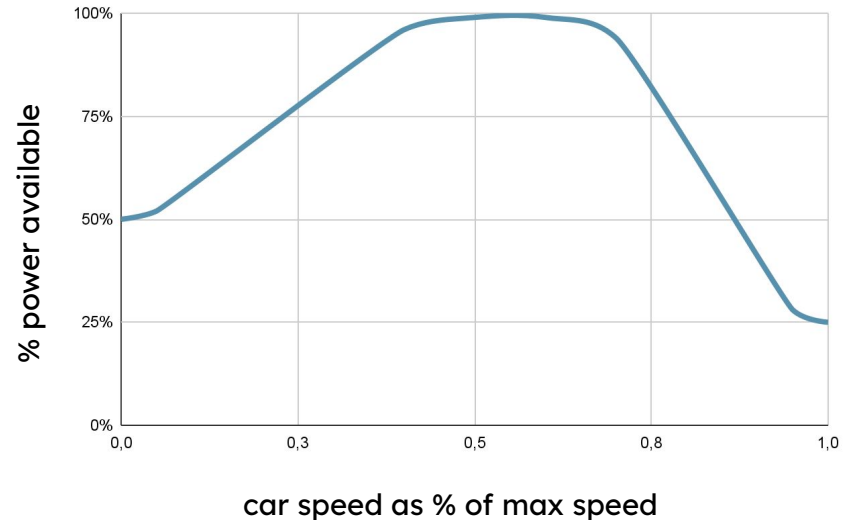
Boost consumption rate : 35

Boost recharge rate : 20

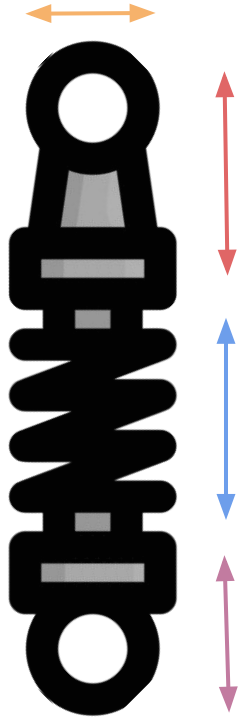
Boost cooldown : 2s

Max speed : 55 m/s - 500 000 in engine

Acceleration curve :



● CHARACTER : SUSPENSIONS



Angular damping : 3

Linear damping : 2

String strength : 50 000

Wheel offset : 60

Ray length : 70

Gravity : 998

Turbine mass : 20

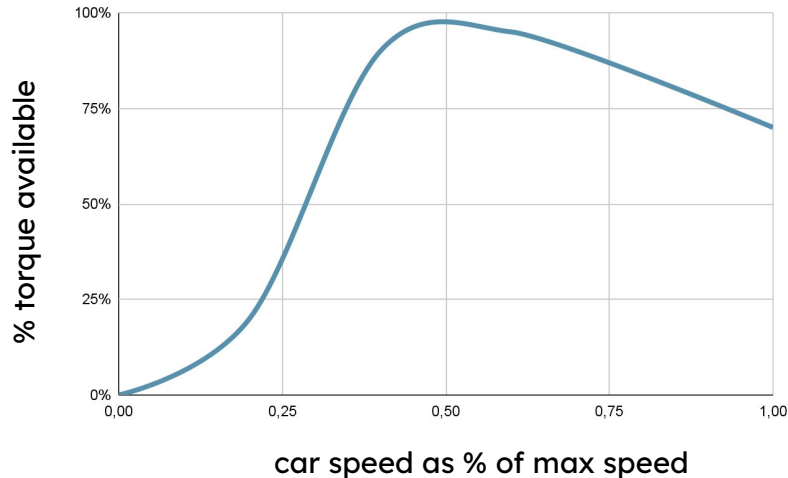
Drifter mass : 225

● CHARACTER : TURN

Steering clamp : 25° to -25°

Steering speed : 100 000

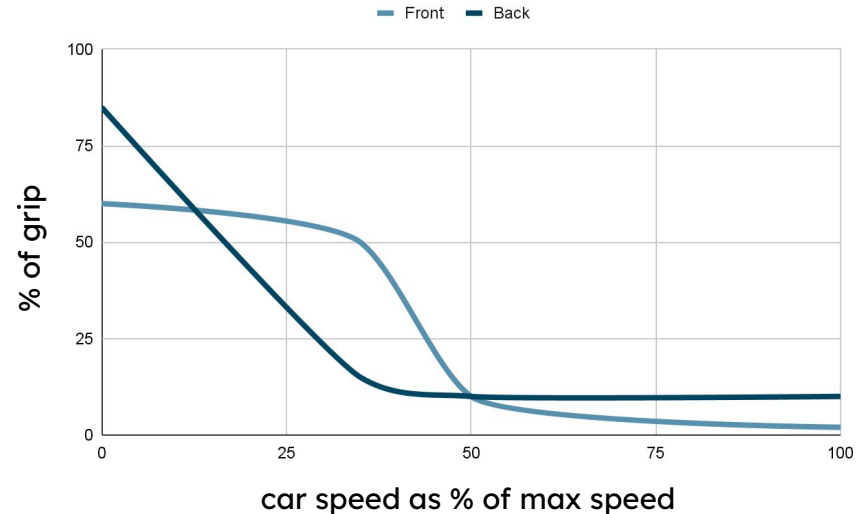
Torque curve :



Max grip : 1

→ front and back grips are different.

Tire grip curve :

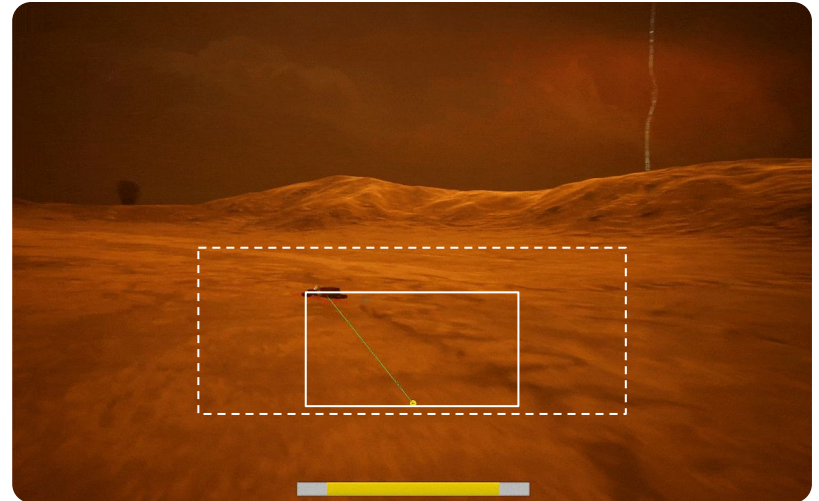
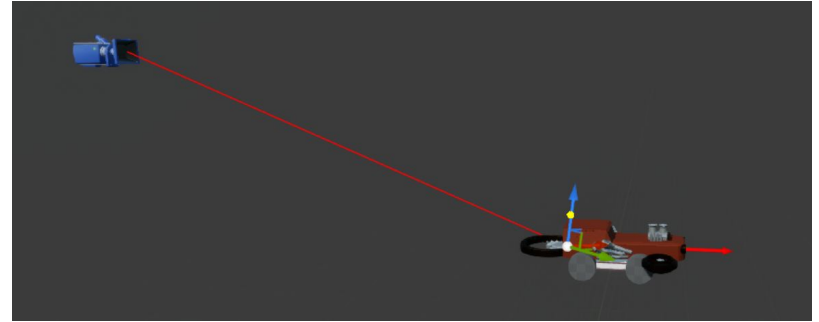


● MAIN CAMERA

A follow camera with smooth movement.

Parameters

- Target distance = 736
- Target offset = (3.5, -11, 47)
- Inherit pitch, yaw and roll
- FOV = 90°
- Camera lag and rotation lag
 - Lag speed = 3
 - Camera rotation speed = 1
 - Camera lag max distance = 3000
- Collision tolerance = 12
- ThumbStick.Right sensibility multiplier = 4
- Reset camera position delay in second = 1



● CAMERA - Wall ride

Context :

Apply when the drifter is on a wall.

Parameters fluctuation :

- Target distance = 800
- Target offset = (3.5, -11, 50)
- Desactivate inherit roll
- Caméra lag et rotation lag
 - Lag speed = 2
 - camera rotation speed = 1



● CAMERA - Within tornado

Context :

Apply when the drifter is in the attraction range of a tornado.

Parameters fluctuation :

- Target distance = 900,65625
- Target offset = (3.5, -11, 48)
- Desactivate inherit roll
- Caméra lag et rotation lag
 - Lag speed = 3
 - Camera rotation speed = 0.4



● CAMERA - Tornado boost

Context :

Apply when the drifter escape the attraction range of a tornado.

Parameters fluctuation :

- FOV = 130
- Dirty lens = 3.45
- Chromatic aberration = 5
- Eye vignette = 0.5
- Blur = 1.12



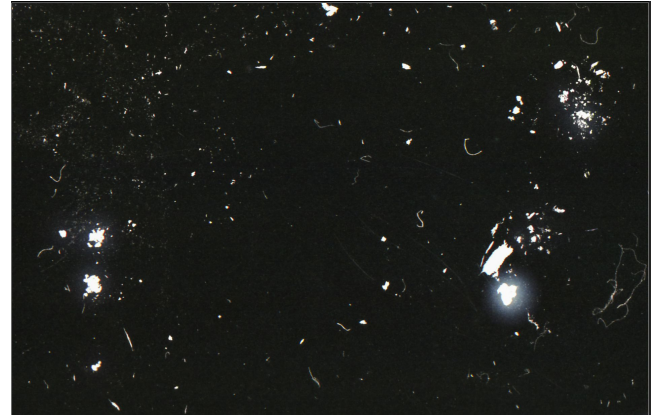
● CAMERA EFFECTS

Stained Mask :

Create immersion when the drifter escape the tornado with a damage lens effect.

Parameters fluctuation :

- Stained mask intensity = 0.601
- Stained mask tint = #FFBE3E



Stained lens mask



● CAMERA EFFECTS

Film grain :

Create an epic cinema look. The game look a bit dirtier which reinforce immersion.

Parameters :

- Film grain intensity = 0.22



● CAMERA EFFECTS

Lens Flare :

Make the lighting more believable.

Parameters :

- Intensity = 9.5
- Threshold = 1.9



● CONTROLS



Input	Input Action	Game Action
Button:A	Hold	Accelerate or break backward speed
Button:A	Not pressed	Decelerate
Button:B	Hold	Break or moving backward
Button:B	Not pressed	Decelerate backward speed
ThumbStick.Left	None	Turn
ThumbStick.Right	None	Rotate camera
Triggers.Left	Hold	Activate boost to the left, consume boost
Triggers.Left	Not pressed	Regain boost
Triggers.Right	Hold	Activate boost to the right, consume boost
Triggers.Right	Not pressed	Regain boost

GROUPE TEZZERET

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