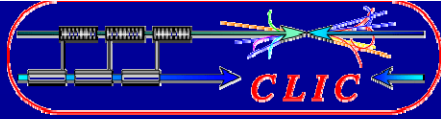


CLIC / ILC Collaboration for CES works

Working Group Convenors : C.Hauviller & John Osborne (CERN), V.Kuchler (FNAL)



CLIC / ILC Collaboration for CFS Works

The following working groups already exist :

- The Conventional Facilities and Siting ‘CFS Team’ for ILC
- ‘Civil Engineering and Services’ CES for CLIC, based at CERN

These groups work independently on the civil engineering and services side of both projects.

However, it has been agreed that resources permitting, both groups will work together on areas of mutual interest for both projects, with participation from both sides at relevant meetings. Next CLIC CES meeting 11 June. CLIC Collaboration meeting in October 08.



CLIC/ILC Collaboration Mandate for CFS Works



- The following working groups already exist :
- 'Civil Engineering and Services' for CLIC, based at CERN
- The 'CFS Team' for ILC

DRAFT

These groups work independently on the civil engineering and services side of both projects.

However, it has been agreed that resources permitting, both groups will work together on areas of mutual interest for both projects, including :

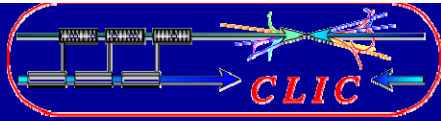
- Civil Engineering Studies
 - Optimisation of Tunnel and Shaft diameters, distance between shafts (linked to safety)
 - Overall layout of the machine and interaction region infrastructure
 - Shallow site v Deep Tunnel Option
 - Single Tunnel v Double Tunnel
 - Safety issues such as emergency egress
 - Environmental issues

Etc.

- Other Infrastructure
 - Cooling Water ?
 - Power Distribution
 - Air Handling
 - Transport Issues
 - Radiation simulations / shielding ?

Etc.

- The progress of these working groups on areas of mutual interest will be reported at the ILC-GDE and CLIC Collaboration Meetings working towards CLIC CDR and ILC TDP Phase I in 2010.
- EU FP7 funding will soon arrive at CERN TS for the ILC studies



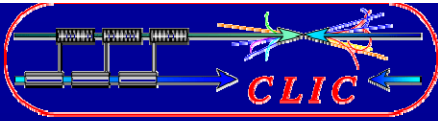
CLIC : Civil Engineering and Services (CES) WG

CES Working Group Representatives :

Civil Engineering and Chairman	J.Osborne
CLIC Link Person	H.Braun
Cooling and Ventilation CV	J.Inigo-Golfin / C.Martel
Electricity EL	K.Kahle
Survey SU	H.Mainaud Durand
Controls, Safety ASE	T.Pettersson
Horizontal Handling HE	K.Kershaw
Vertical Handling HE	I.Ruehl
CE Layouts and cross-sections	A.Kosmicki / D.Parchet
SC Link Person	R.Trant
ILC members	V.Kuchler (FNAL), A.Enomoto (KEK)

Monthly and ad-hoc meetings.

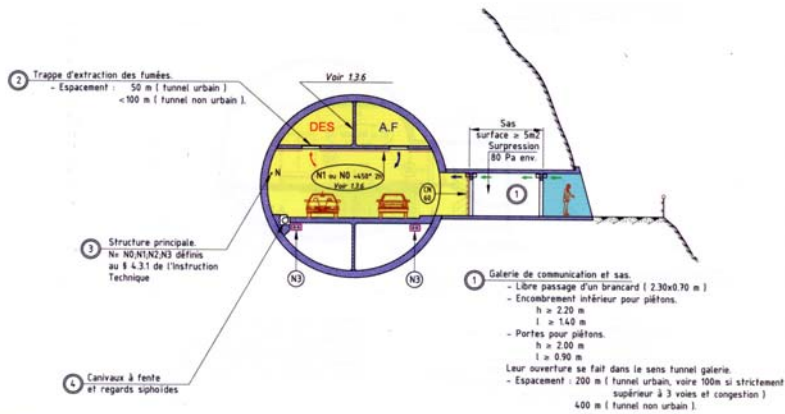
Reporting to CLIC Technical Committee chaired by C.Hauviller.



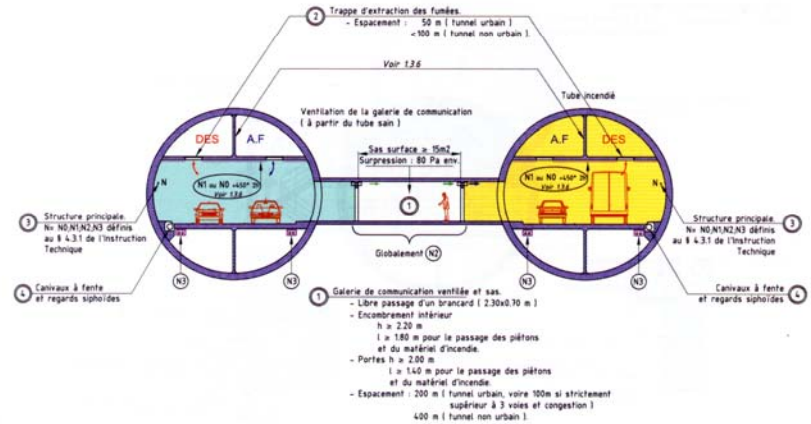
Possible Ventilation Systems for road tunnels

1.4.2 - Méthode tunnelier, types T

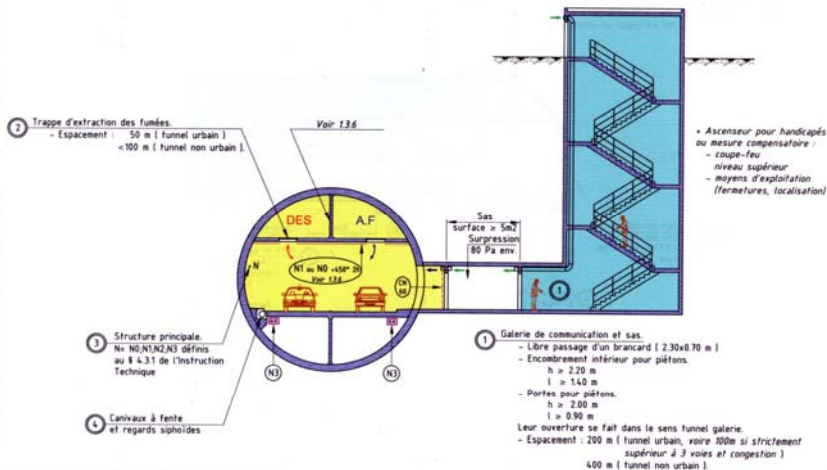
EVACUATION DIRECTEMENT VERS L'EXTERIEUR DU TUNNEL BIDIRECTIONNEL
(CHEMINEMENT HORIZONTAL)
Type "T1a"



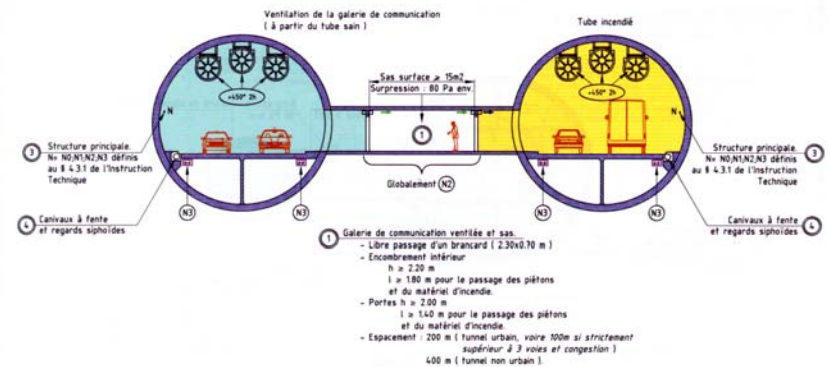
BITUBE – EVACUATION DANS LE DEUXIEME TUBE
Type "T2a" – Ventilation transversale



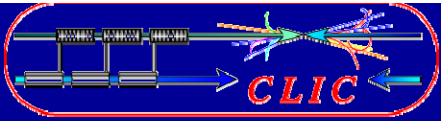
EVACUATION DIRECTEMENT VERS L'EXTERIEUR DU TUNNEL BIDIRECTIONNEL
(CHEMINEMENT VERTICAL)
Type "T1b"



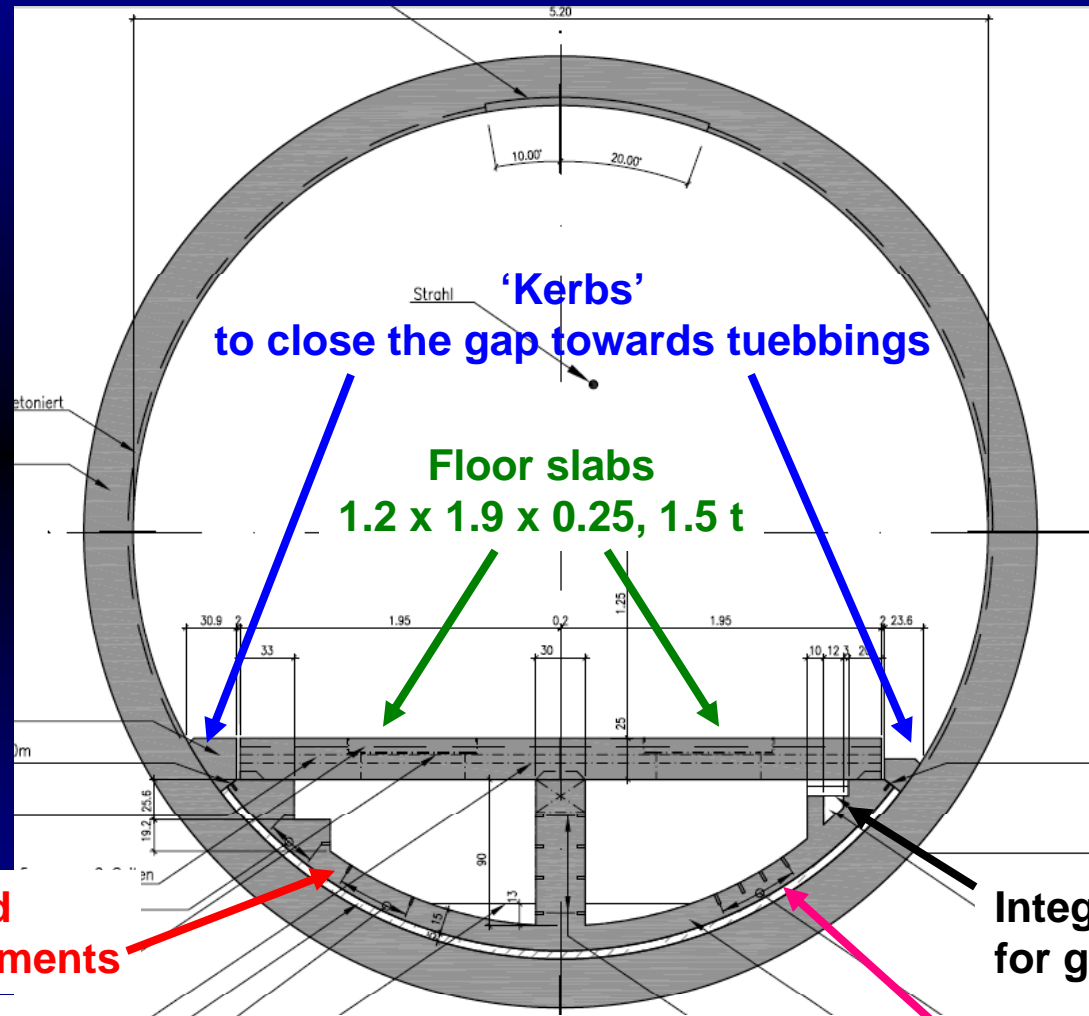
BITUBE – EVACUATION DANS LE DEUXIEME TUBE
Type "T2b" – Ventilation longitudinale



Extracted courtesy of 'French Tunnelling Association : AFTES : Tunnels routiers : résistance au feu Jan 2008'



XFEL Complicated floor / underfloor construction



Floating pre-casted high precision segments
1.20 m in Z

In-situ mortar layer for gap filling towards tuebbing shell

Integrated channel for glass fibres