



Erasmus Days 2020

Department of Computer and Electronics Engineering
Kantipur Engineering College



Sushil Paudel

sushilpaudel@kec.edu.np



With the support of the
Erasmus+ Programme
of the European Union



03/11/2020



Copyright © eACCESS



1



Introduction- Nepal

- Landlocked Country
- Area 147,516 km²
- The current population > 29,275,375
- 80.26 percent of the population > residing in rural areas.
- Agriculture- Backbone of Nepalese Economy
- Hydropower- Huge Potential
- Nepal has planned to produce 12,000 MW clean energy by 2030.





Introduction- Contd...

- Total Installed Capacity: 1350 MW
- NEA Hydro: 518 MW, IPP Hydro: 714 MW, Solar: 1.35MW, Thermal: 53MW
- Annual Average Energy Production: 3,443 GWhr
- Most ROR HPPs, Few PROR and only one Storage HPP.
- Varying geographical altitude (59m-8848m from sea level)



Introduction- KEC

- Located in Capital of Country
- Affiliated to largest university of Nepal, TU
- BE programs: Civil, Computer and Electronics, Communication & Information Engineering.
- Was involved as partner institution in Euro-Asia Link Project, Erasmus Mundus eLINK, cLINK, FUSION and Smartlink Project
- Currently, involved as partner institution of SUNSpACe, eACCESS (Erasmus+) and YETIS projects (Innovate UK Project)





Planned HPPs

- Budhi Gandaki HEP - 1200 MW
- Upper Seti HEP-127 MW
- Dudhkoshi Storage HEP - 300 MW
- Uttar ganga HEP: 300 MW
- Nalsyagu gad HEP– 400 MW
- West Seti HEP : 750 MW
- Total capacity for licensed 207 projects (more than 1 MW) = 7188.617 MW
- Total capacity for licensed 25 projects (less than 1 MW) = 19.634 MW



Planned Transmission line and sub stations

- 1 no. of 400 kV : 78 ckt km
- 27 nos. of 132 kV: 2416 ckt km
- 16 nos. of 66 kV: 511 ckt km
- 29 nos. of 132 kV substations: 1765 MVA
- 12 nos. 66 kV substations: 458 MVA
- 9 nos. of UC 132kV tr lines: 775 ckt km
- 6 nos of 220 kV tr lines: 1049 ckt km
- 2 no. of 400 kV tr line (Hetauda-Dhalkebar-Duhabi, and Tamakoshi Kathmandu): 570 ckt km



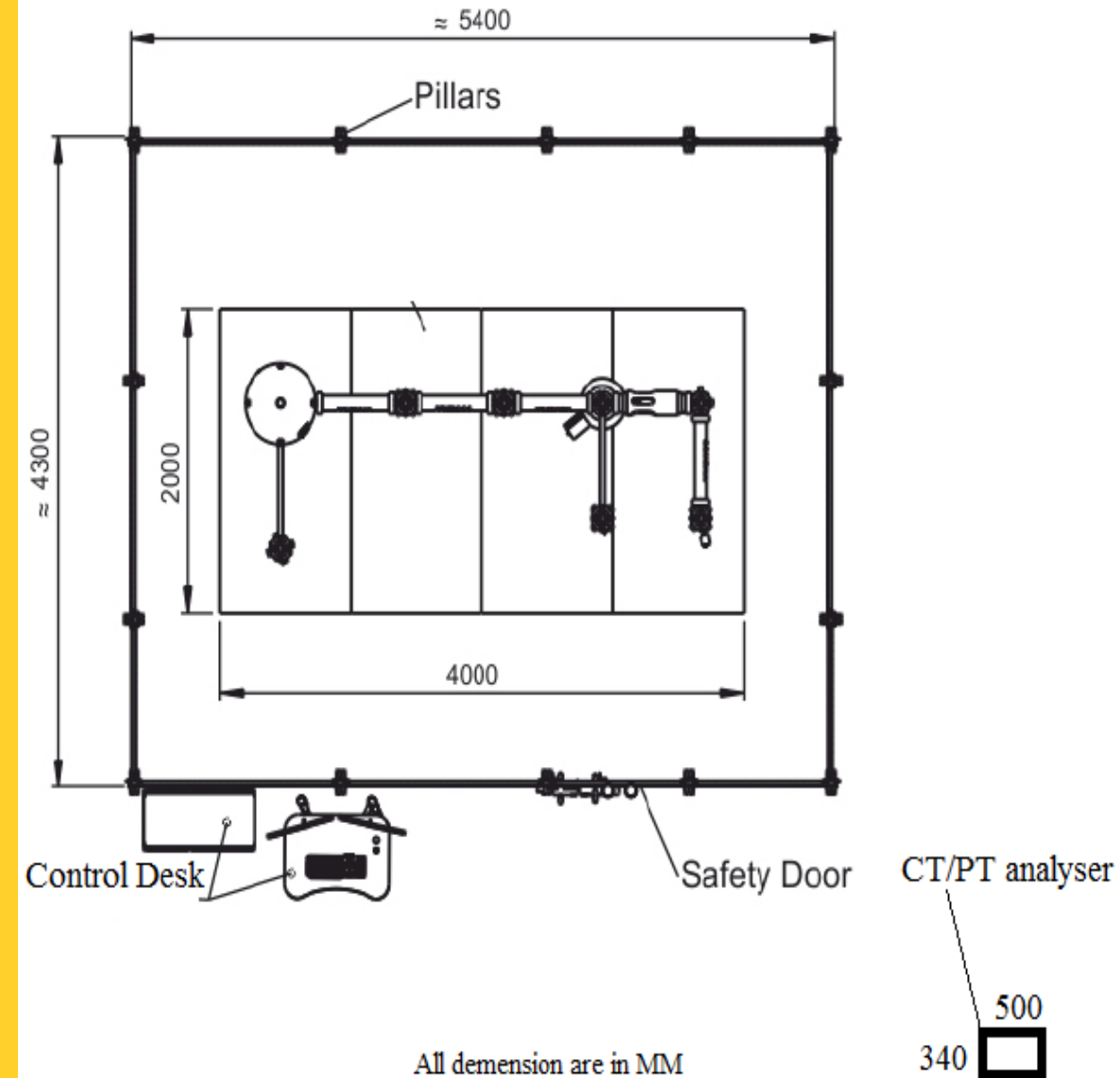
Importance of eACCESS Project in Nepalese Context

- New kind of Masters Program in Nepal
- Unique Vocational Trainings
- Importance of Laboratory
- Development of teaching modules in undergraduate level
- Demand of skilled manpower will increase
- Research activities will foster
- Benefits to stakeholders
- Useful to Pokhara University, Nepal Electricity Authority and Kathmandu University aswell.



Development of unique High Voltage Laboratory at KEC

- E-learning platform
- Online tests, assessments
- Result generation and analysis





With the support of the
Erasmus+ Programme
of the European Union



Thank you



Kantipur Engineering College

Tribhuvan University, Kathmandu, Nepal



Sushil Paudel



sushilpaudel@kec.edu.np



<https://kec.edu.np/>