

accepted by the office of Chief Controller of Import and Exports, who monitor the export obligations, so undertaken. For the grant of further licences to a Company, the export obligation imposed and fulfilled in respects of earlier licences granted to it is not generally reviewed.

(c) and (d). Under the recent liberalisation of industrial policy, no relaxation in complying with export obligation undertaken by the Companies has been announced, and accordingly, the export obligations undertaken have to be fulfilled by the Companies under the existing procedure.

Insat-2A

3589. SHRI RAMESH CHENNI-
THALA:
SHRI P.C. THOMAS:

Will the PRIME MINISTER be pleased to state:

(a) the time by which the INSAT-2A is going to be launched;

(b) its functions;

(c) the funds allotted therefor;

(d) scientific and technological results expected therefrom; and

(e) the countries which have launched similar satellites?

THE MINISTER OF STATE IN THE MINISTRY OF PERSONNEL, PUBLIC GRIEVANCES AND PENSION (SHRIMATI MARGARET ALVA): (a) INSAT-2A is scheduled to be launched in June, 1992.

(b) Similar to the INSAT-1 satellites, the INSAT-2A will provide telecommunications,

broadcasting and meteorological services to the country.

(c) The approved budget outlay for the INSAT-2A & B Satellites is Rs. 243.10 crores and for their launch services is Rs. 198.30 crores.

(d) INSAT-2A satellite has been built indigenously. Apart from providing the telecommunications, broadcasting and meteorological services, the technological expertise and infrastructure within the country for building operational satellites has also been developed.

(e) There are a large number of countries using satellites for telecommunications and broadcasting services. Examples are: USA, Canada, France, Japan, Australia, Indonesia, Mexico, Brazil, China, CIS (formerly USSR), etc. USA, Europe (European Space Agency) and Japan have geostationary meteorological satellites.

Seminar on Energy Efficiency in Buildings

3590. DR. KRUPASINDHU BHOI: Will the Minister of URBAN DEVELOPMENT be pleased to state:

(a) whether the seminar on energy efficiency in buildings, organised by C.P.W.D. has recommended energy conservation devices for installation in buildings; and

(b) if so, the details thereof?

THE MINISTER OF STATE IN THE MINISTRY OF URBAN DEVELOPMENT (SHRI M. ARUNACHALAM): (a) Yes, Sir.

(b) The Energy conservation measures recommended by the Seminar for installation in buildings are given in the enclosed Statement.

STATEMENT

masonry without compromising strength and durability.

1. AT PLANNING STAGE

- (a) Means of providing natural ventilation with the help of building network.
- (b) Providing orientation of building blocks for optimum natural light & ventilation cutting, the summer sun as far as possible.

(d) Encouraging the use of mud mortar wherever possible.

(e) Use of concrete manhole covers instead of cast iron ones.

2. AT ARCHITECTURAL DESIGN STAGE**4. ELECTRICAL & MECHANICAL SERVICES:**

- (a) With reference to orientation of buildings, fixing the sizes and location of windows for allowing maximum natural light and ventilation inside.

(a) Use of energy efficient lamps and high efficiency luminaires.

(b) Use of energy efficient ballasts.

- (b) Provision of sun shades of optimum sizes to cut the incidence of sun and impart cooling inside the building.

(c) Reduction in energy consumption in Air-conditioning by:

(i) Microprocessor based control for sequence operation of A.C. Plant.

(ii) Adopting 2 speed fan motors for cooling towers.

- (c) Providing optimum glass area in windows, double/triple glazing etc. for permitting transmission of light and minimizing transmission of solar heat radiation.

(iii) Use of centrifugal machines for medium and large air-conditioning load.

(iv) Recovering the heat from compressor discharge by use of desuper heaters and double section condenser.

- (d) Proper designs of windows and to enhance cooling and ventilation.

(v) Use of absorption chillers where waste heat is available.

- (3) **BY USE OF MATERIALS CONSUMING LESS ENERGY IN THEIR MANUFACTURE:**

(vi) Adoption of building automation system;

- (a) Encouraging the use of clay/fly ash bricks and sand lime bricks for low production energy.

(vii) Use of Heat Recovery wheels for 100% fresh air applications.

- (b) Reduction in cement consumption by using plasticisers

5. USE OF RENEWABLE AND NON-CONVENTIONAL ENERGY SOURCES:

Encouraging the use of lime in

- (a) Use of solar energy for water heating.
- (b) Use of solar photo voltaic systems for buildings in remote areas/site.

Public Sector Units

3591. SHRI K. RAMAMURTHEE TINDIVANAM: Will the PRIME MINISTER be pleased to state:

- (a) the number of Public Sector Units in the country;
- (b) the number out of them declared chronically sick; and
- (c) the policy of the Government regarding these sick units?

THE MINISTER OF STATE IN THE MINISTRY OF INDUSTRY (SHRI P.K. THUNGON): (a) As on 31.3.1991 there were 246 Central Public Sector Enterprises, out of which 10 PSEs were under construction.

(b) and (c). Based on the performance upto the year 199091, there are 54 sick public sector undertakings which are required to be referred to the Board for Industrial & Financial Reconstruction (BIFR) for the formulation of suitable revival/rehabilita-

tion schemes in accordance with Sick Industrial Companies (Special Provisions) Act, 1985.

No Industry Districts

3592. SHRI K.V. THANGKABALU: Will the PRIME MINISTER be pleased to state:

(a) the number of 'no industry districts' in the country, at the beginning and the end of the seventh Five Year Plan, State-wise; and

(b) the efforts being made to remove regional imbalances in the country?

THE MINISTER OF STATE IN THE MINISTRY OF INDUSTRY (PROF. P.J. KURIEN): (a) The number of 'No Industry Districts' in the country is 93. A Statewise distribution of the NIDs is given in the statement attached.

(b) With a view to bringing about regional dispersal in the country, Government are operating a Growth Centre Scheme which is being implemented during the Eighth Five Year Plan period. Under the Scheme, 70 growth centres would be set up throughout the country each at a cost of Rs. 25-30 crores and would be provided with basic infrastructural facilities like power, water, telecommunication, etc. so as to attract industries to the centres.

STATEMENT

<i>Sl. No.</i>	<i>State</i>	<i>Number</i>
1.	Assam	2
2.	Bihar	6
3.	Gujarat	1
4.	Himachal Pradesh	5