

INDOCOATING & CORROSION SUMMIT 2008

“THE ROLE OF GOVERNMENT PROPOSE POLICY IN MITIGATION OF CORROSION”

ATTE SUGANDI, MP
A – 86, DEMOCRATIC PARTY FRACTION
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1

Corrosion Cost to Nations?

Since the first significant reports by Uhlig in 1949, that the cost of corrosion to nation is indeed great, the conclusion of all subsequent studies has been that corrosion represent a consultant change to a nations gross national product (GNP) to annual cost of corrosion the US was estimated in Uhlig's report to be \$ 5.5 billion or 2.1% of the 1949 GNP.

A recent study has determined that the total cost of corrosion in the United States alone is approximately \$276 billion/year. This figure represents about 3.1 % of the Gross National Product (GNP) based on 1998 figures (Paul Virmani, John M. Hooks, FHWA, 2008).

(CONTINUED...)

2

Corrosion cost studies for several countries, US, UK, Japan, Australia, Kuwait, Germany, Finland, Sweden, India and China (Koch GH, et al 2001), finding annual corrosion cost range from 1% to 5% of the GNP of each nations.

Indonesia, GNP 2008 Rp. 4.315.909 T, 1% GNP : Rp. 43.159 T

The annual cost of corrosion and corrosion protection in the United States is estimated by the National Association of Corrosion Engineers (NACE) to be in excess of 10 billion dollars. This figure is perhaps less intimidating considering that corrosion occurs, with varying degrees and types of degradation, whenever metallic are used.

Recent studiess reveal that it costs the DoD between \$10 billion and \$20 billion each year to mitigate corrosion effects or try to prevent corrosion (Daniel J. Dunmire, 2004).

3

CORROSION MITIGATION

- Reduce stresses as much as possible
- Apply the standard coating system used for Corps hydraulic structures on ALL surfaces
- Provide impressed current cathodic protection systems
- Test and maintain cathodic protection systems

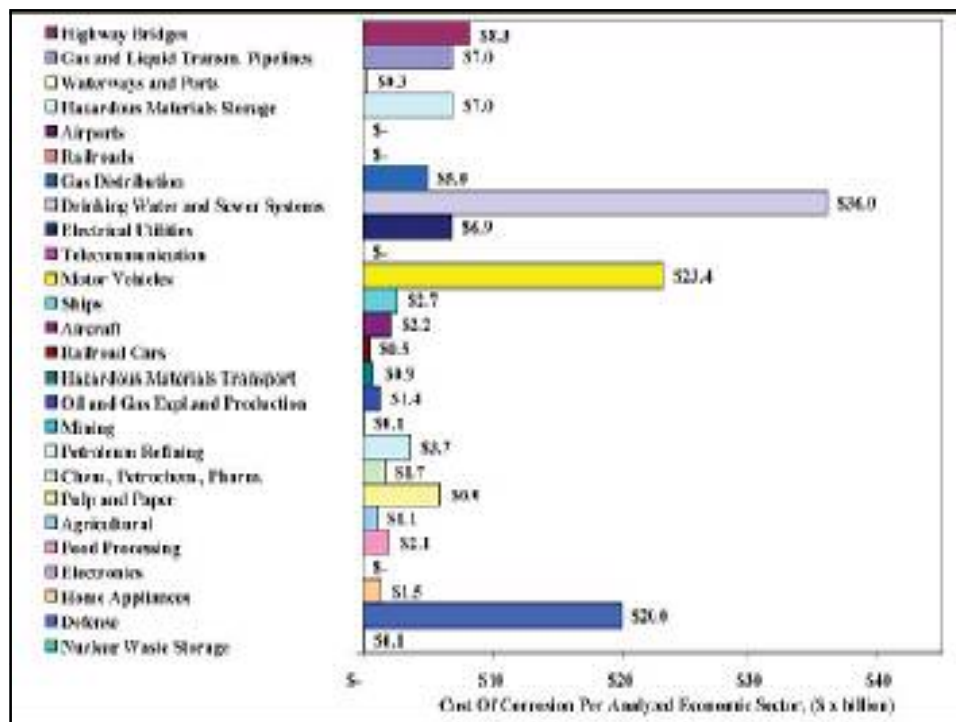
MAJOR NOTE:

It must be clearly noted that coating and cathodic protection will stop any further corrosion,

BUT

THEY WILL NOT REPAIR EXISTING CORROSION

4

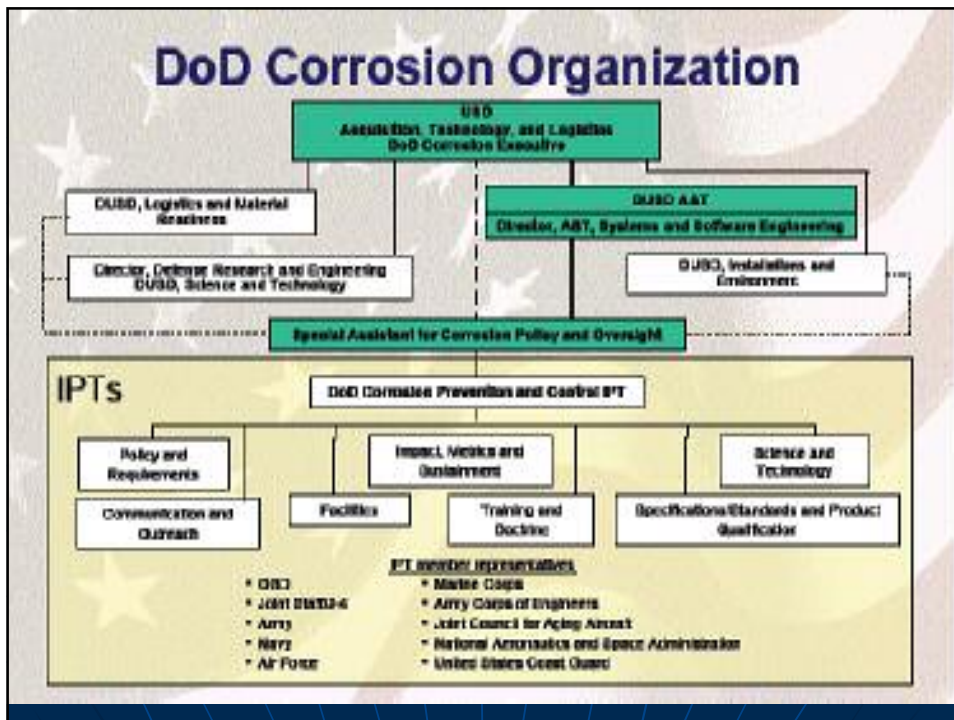


The Law

*Public Law 107-314 Sec: 1067 [portions codified in 10 U.S.C. 2228]:
Prevention and mitigation of corrosion of military infrastructure and equipment requires that:*

- **DoD designate a responsible official or organization**
- **DoD develop a long-term corrosion strategy to include**
 - Expansion of emphasis on corrosion prevention & mitigation
 - Uniform application of requirements and criteria for the testing and certification of new corrosion prevention technologies within common materiel, infrastructure, or operational groupings
 - Implementation of programs to collect and share information on corrosion within the DoD
 - Establishment of a coordinated R&D program with transition plans

Strategy to include policy guidance & assessment of funding and personnel resources required



PROPOSED POLICY IN MITIGATION OF CORROSION BILL

Challenge to all participant to thinking about the role of government policy in Mitigation of Corrosion, to possibility making the draft Mitigation of Corrosion Bill, proposed: by government, by Member of Parliament or Member of SENat / DPD – Regional Council.