



KOCAELİ SANAYİ ODASI
KOCAELI CHAMBER OF INDUSTRY

Güvenlik Yönetim Sistemi Büyük Kazaların Belirlenmesi ve Değerlendirilmesi Modülünün Süreç Olarak Açıklanması

Makina Müh. Özgür ÖZGÜN

Dyo Boya Fabrikaları A.Ş.

14-15 MAYIS 2018



BÜYÜK ENDÜSTRİYEL KAZALARIN ÖNLENMESİ VE ETKİLERİNİN AZALTILMASI HAKKINDA YÖNETMELİK

Resmi Gazete Tarihi: 30.12.2013 Resmi Gazete Sayısı: 28867
Mükerrer

EK-3

GÜVENLİK YÖNETİM SİSTEMİ İLE İLGİLİ OLARAK YÖNETMELİĞİN 10
UNCU VE 11 İNCİ MADDELERİNDE BELİRTİLEN PRENSİPLER VE
BİLGİLER İLE BÜYÜK ENDÜSTRİYEL KAZALARIN ÖNLENMESİNE
YÖNELİK İŞLETMENİN ORGANİZASYONU

Güvenlik Yönetim Sistemi Modülleri :

A – Organizasyon ve Personel

B – Büyük Kazaların Belirlenmesi ve Değerlendirilmesi

C – İşletim Kontrolü

D – Değişimin Yönetimi

E – Acil Durumlar İçin Planlama Modülü

F – Performansın İzlenmesi Modülü

G – Denetleme ve İnceleme Modülü

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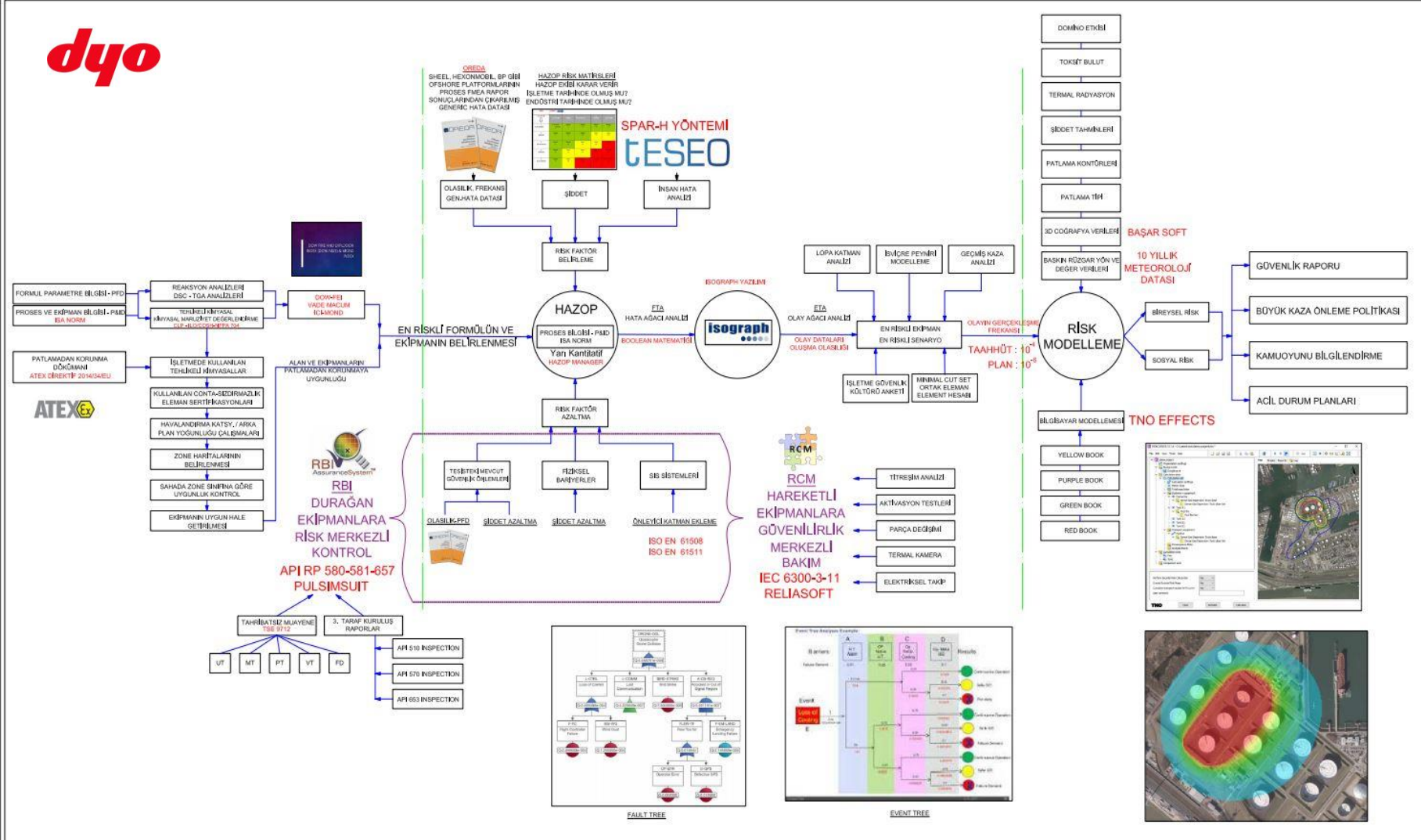
E – Acil Durumlar İçin Planlama Modülü

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B.E.K.BELİRLENMESİ VE DEĞERLENDİRİLMESİ

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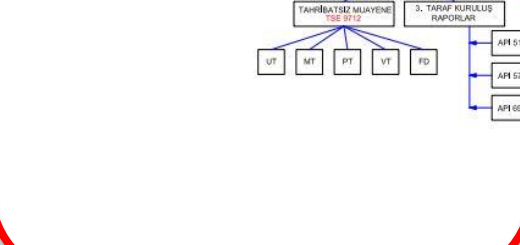
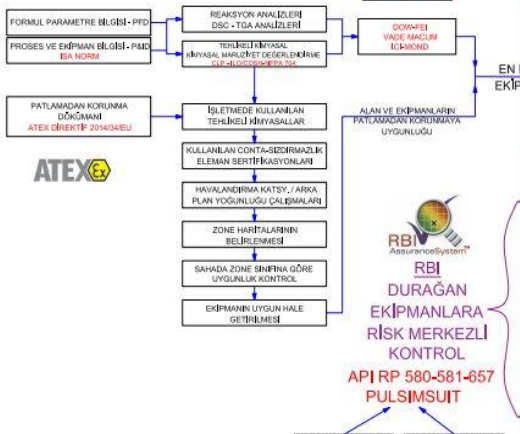
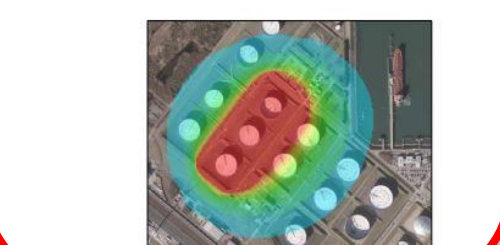
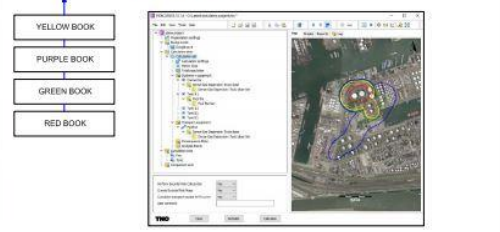
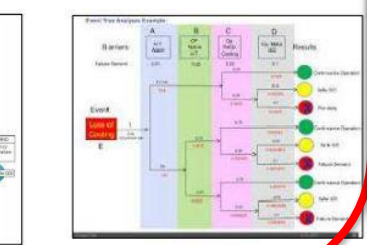
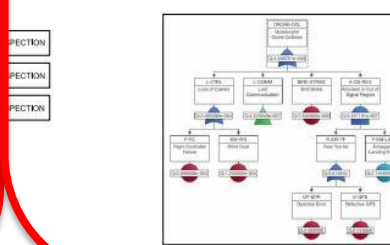
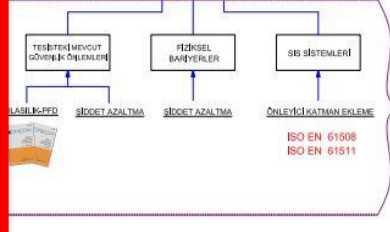
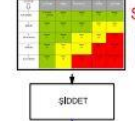


SÜREÇ AKIŞI

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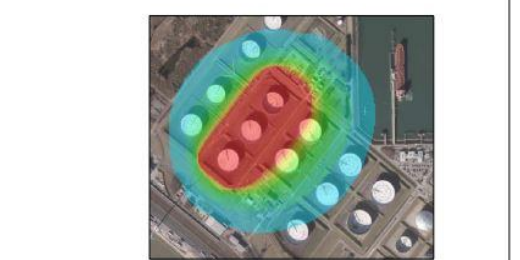
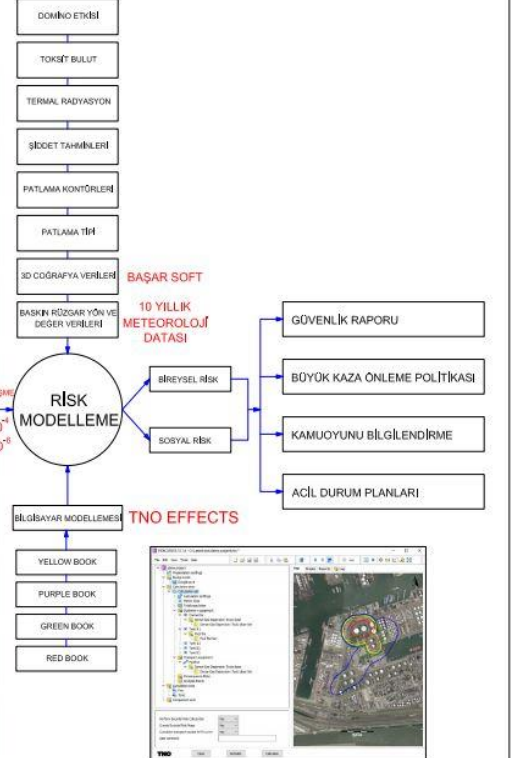
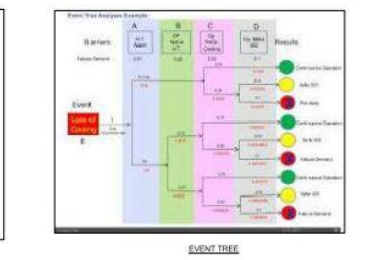
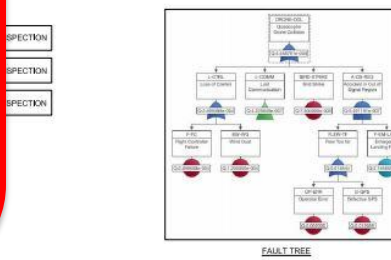
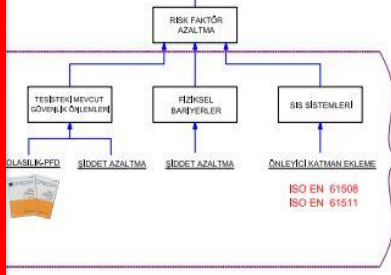
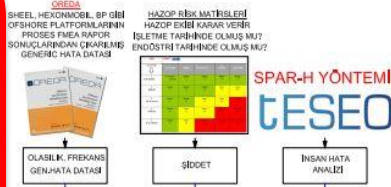
OSEDA
REEL, HEXONMOBİL, İP GİRİŞİ
SHORE PLATFORMLARININ
PROSES FİREKA RAPORU
SONUÇLARINDAN ÇIKARILMIŞ
GENELİC HATA DATASI

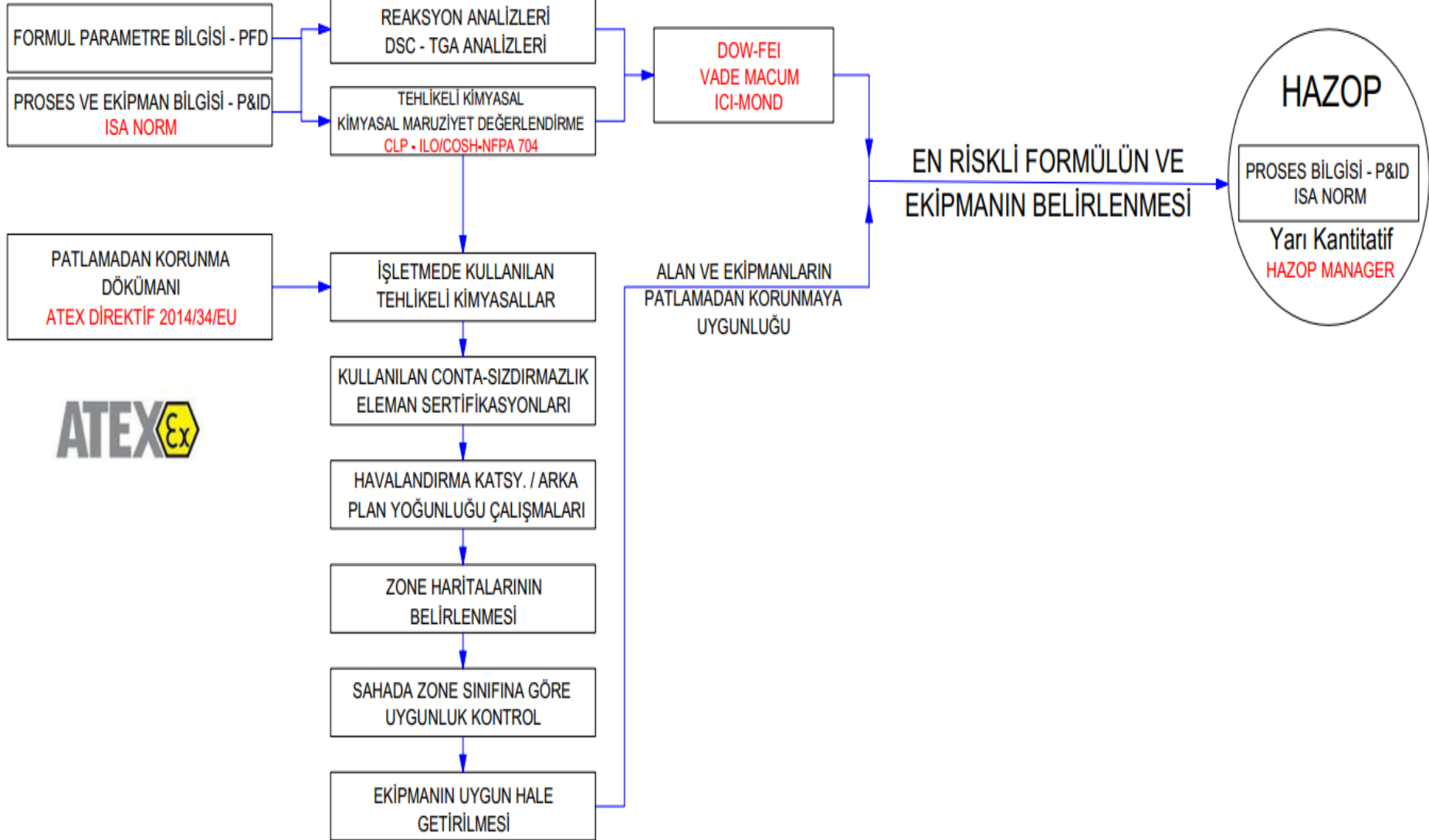


SÜREÇ AKIŞI

B.E.K.BELİRLENMESİ VE DEĞERLENDİRİLMESİ

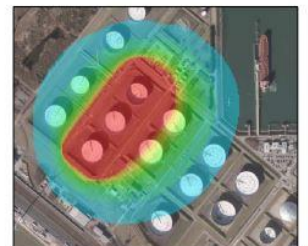
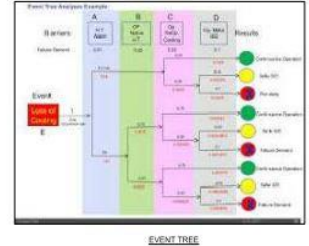
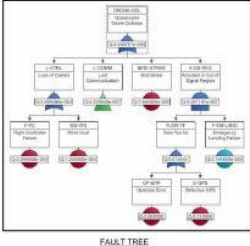
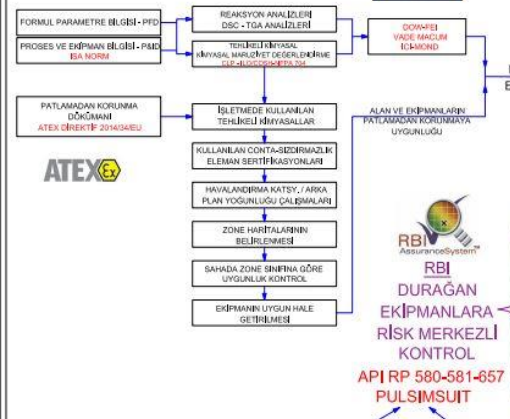
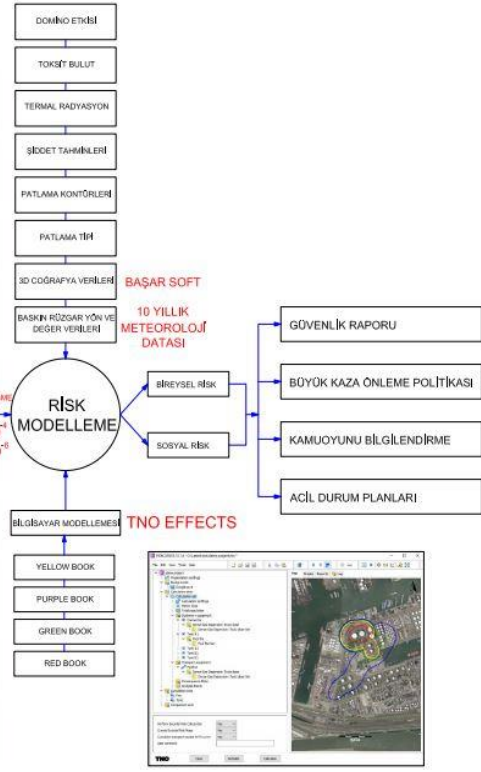
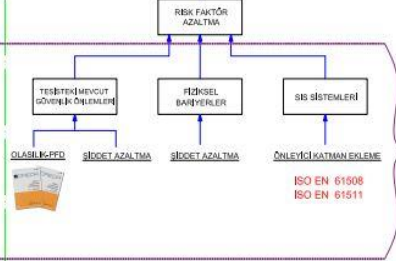
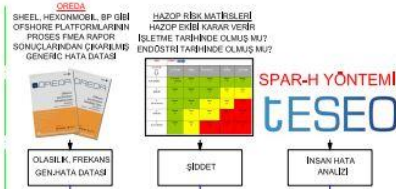
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B.E.K.BELİRLENMESİ VE DEĞERLENDİRİLMESİ

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SHEEL, HEXONMOBİL, BP GİBİ OFSHORE PLATFORMLARININ PROSES FMEA RAPOR SONUÇLARINDAN ÇIKARILMIŞ GENERİK HATA DATASI

HAZOP RİSK MATRİSLERİ
HAZOP EKİBİ KARAR VERİR
İŞLETME TARİHİNDE OLMUŞ MU?
ENDÜSTRİ TARİHİNDE OLMUŞ MU?



SPAR-H YÖNTEMİ
TESEO

OLASILIK, FREKANS GEN.HATA DATASI

ŞİDDET

İNSAN HATA ANALİZİ

RİSK FAKTÖR BELİRLEME

EN RİSKLİ FORMÜLÜN VE EKİPMANIN BELİRLENMESİ



ETA
HATA AĞACI ANALİZİ
BOOLEAN MATEMATİĞİ

ISOGRAPH YAZILIMI



RBI DURAĞAN EKİPMANLARA RİSK MERKEZLİ KONTROL
API RP 580-581-657
PULSİMSUIT

TESTİSTEKİ MEVCUT GÜVENLİK ÖNLEMLERİ

FİZİKSEL BARIYERLER

SİS SİSTEMLERİ



OLASILIK-PFD

ŞİDDET AZALTMA

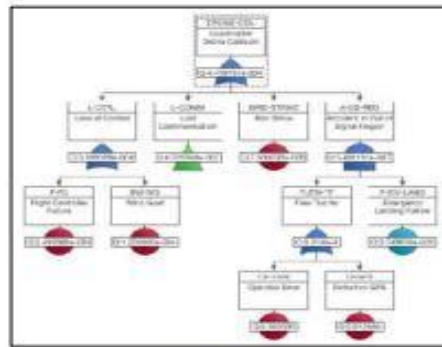
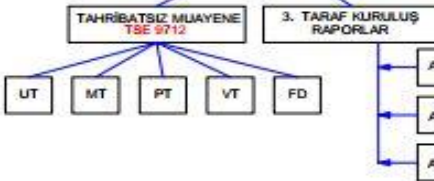
ŞİDDET AZALTMA

ÖNLEYİCİ KATMAN EKLEME
ISO EN 61508
ISO EN 61511

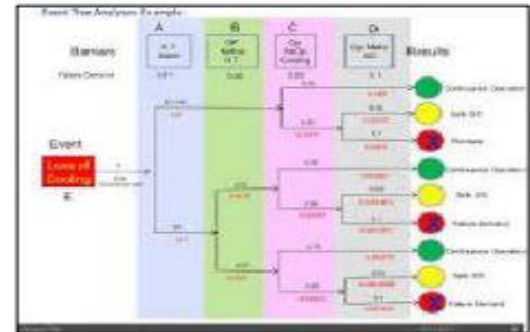


RCM HAREKETLİ EKİPMANLARA GÜVENİRLİK MERKEZLİ BAKIM
IEC 6300-3-11
RELIASOFT

- TİTREŞİM ANALİZİ
- AKTİVASYON TESTLERİ
- PARÇA DEĞİŞİMİ
- TERMAL KAMERA
- ELEKTRİKSEL TAKİP

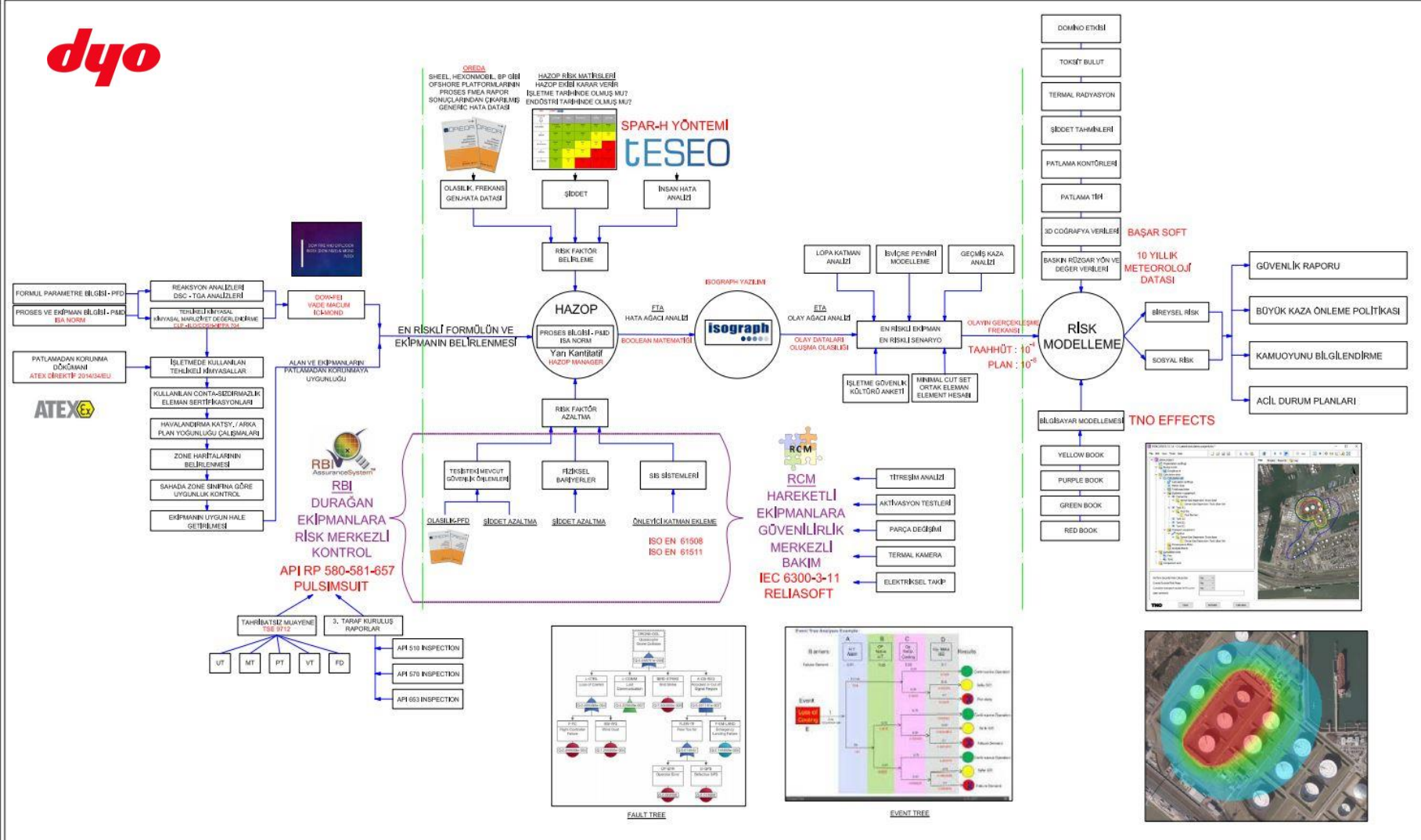


FAULT TREE



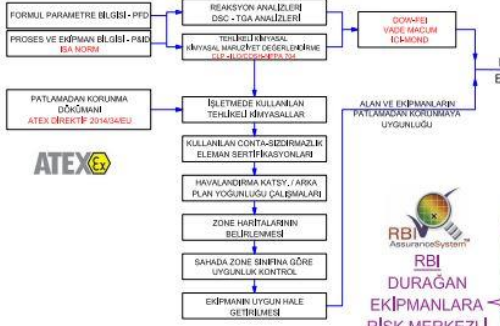
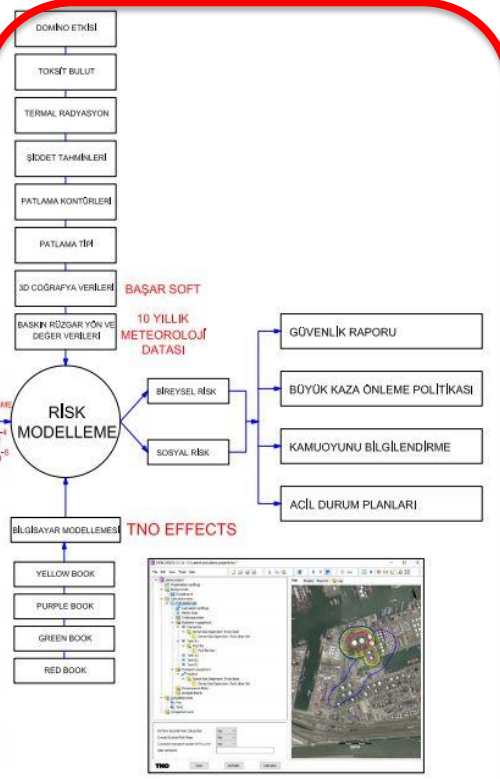
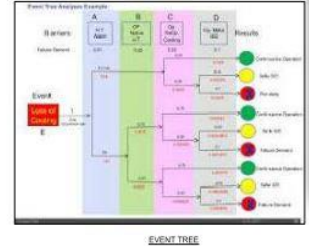
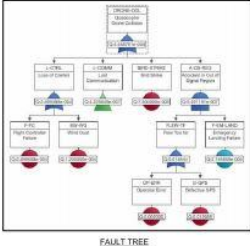
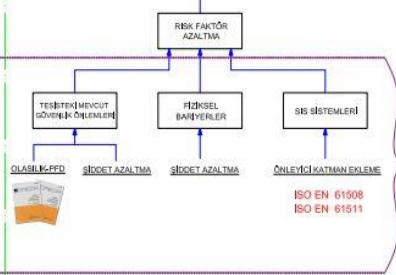
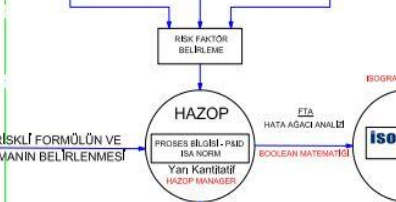
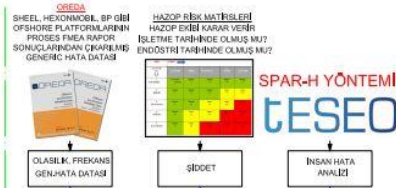
EVENT TREE

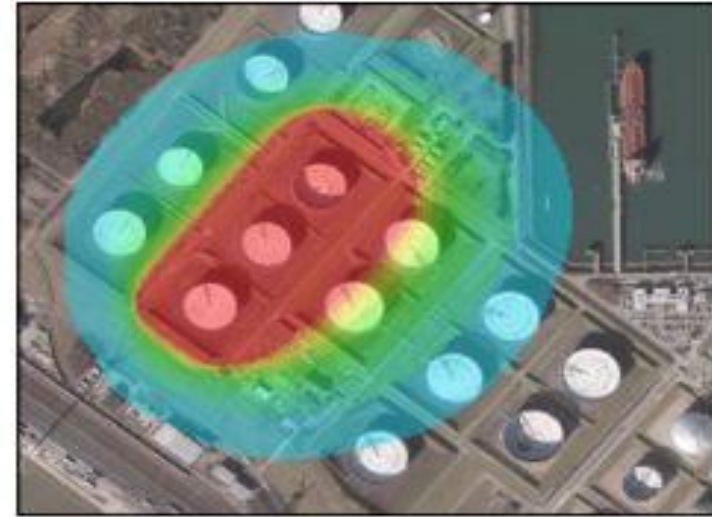
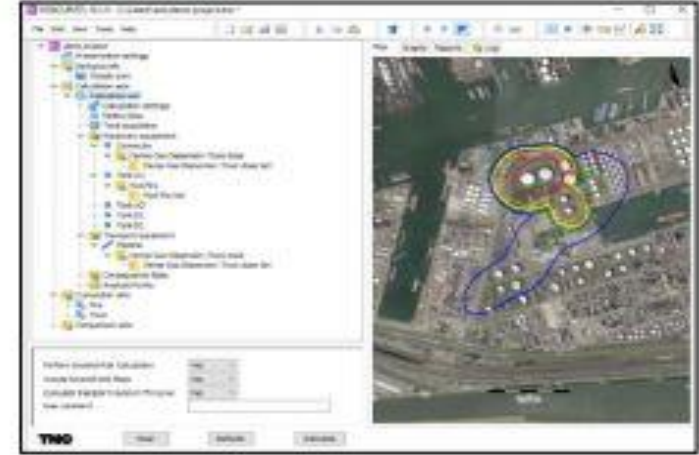
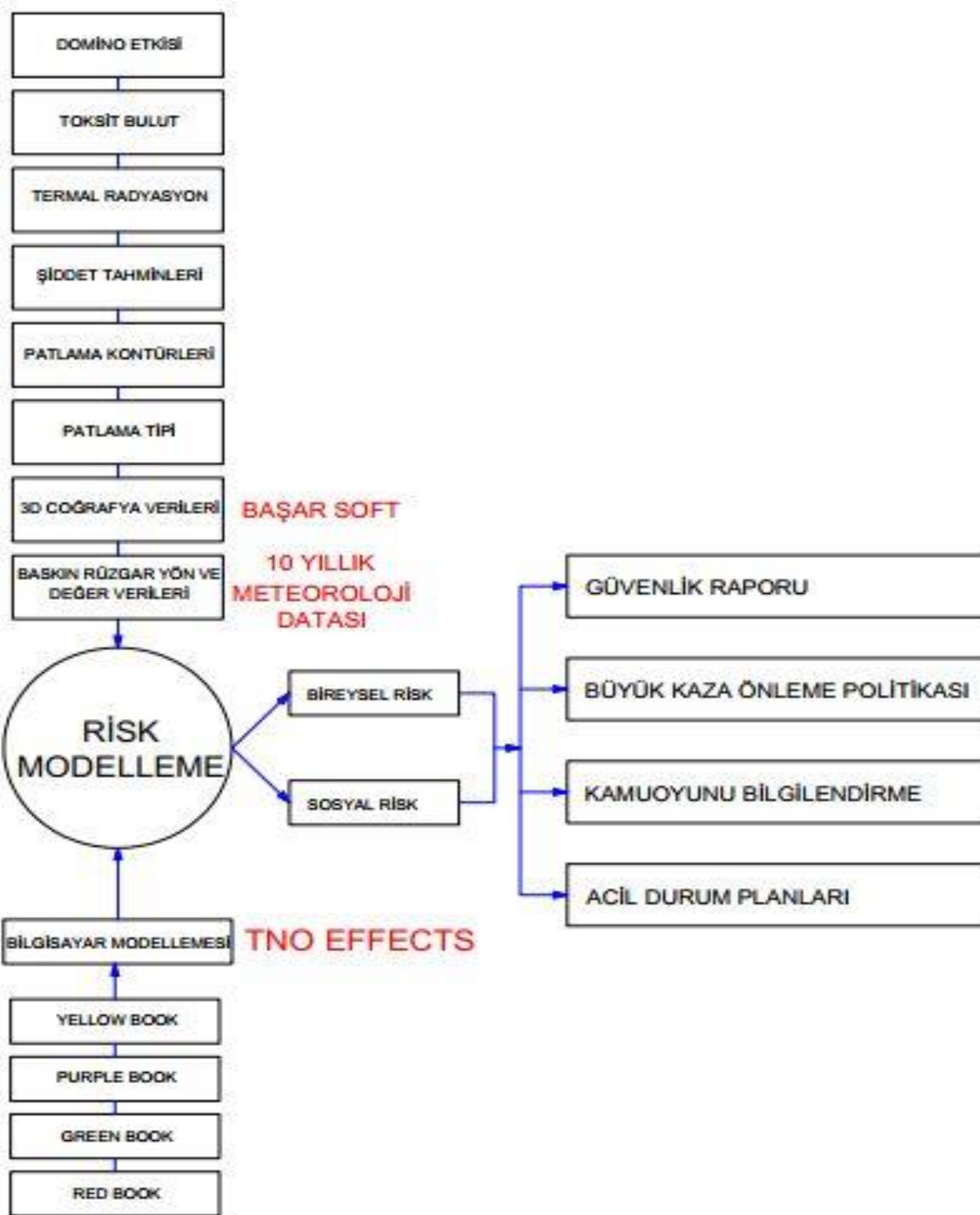
B.E.K.BELİRLENMESİ VE DEĞERLENDİRİLMESİ



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dyo





KOCAELİ SANAYİ ODASI

PROSES
EMNİYETİ SEMPOZYUMU



KOCAELİ SANAYİ ODASI

K O C A E L İ C H A M B E R O F I N D U S T R Y