Action 338:
http://www.w3.org/2005/06/tracker/wspolicy/actions/338

Primer reference :
http://www.w3.org/TR/2007/WD-ws-policy-primer-20070810/#compatible-policies

Note: No health warnings are given because these are examples based on what is explicitly allowed for the use of RequireExplicitDerivedKeys in WS-SecurityPolicy. Please advise if any such statement is needed.
THIS IS A START CONCEPT ONLY.

UPDATED DRAFT CHANGES:
SECTION 3.4
…Two policy alternatives are compatible if each policy assertion in one alternative is compatible with a policy assertion in the other and vice-versa. For instance in Examples 3.6 and 3.7, policy assertions (c1) and (c2) in Company-X's policy alternative are compatible with policy assertions (t2) and (t1) in the client's policy alternative. Company-X's policy alternative (a) and the client's policy alternative are compatible, because assertions in these two alternatives are compatible.

Two policies are compatible if a policy alternative in one is compatible with a policy alternative in the other. For example, Company-X's policy alternative (a) is compatible with the client's policy alternative. Company-X's policy and the client's policy are compatible because one of Company-X's policy alternative is compatible with the client's policy alternative.

[add] Consider a similar scenario between Company X and the client where compatible nested policy expressions exist in the policy alternatives. The nested policy expressions are evaluated in the context of their parent policy assertions in policy intersection. For example, take these two policies: Example 3.8 Company X Nested compatible/incompatible policy example

Company X

```
(P001) <wsp:Policy wsu:Id="wss10_up_cert_policy" >
(P002)  <wsp:ExactlyOne>
(P003)    <wsp:All>
(P004)      <sp:AsymmetricBinding>
(P005)        <wsp:Policy> [nested policy b1]
(P006)          <sp:InitiatorToken>
(P007)            <wsp:Policy> [nested policy b2]
(P008)              <sp:X509Token> [parent policy assertion]
(P009)                <wsp:Policy> [nested policy b3]
(P010)                  <sp:RequireExplicitDerivedKeys/>
(P011)                </wsp:Policy>
(P012)              </sp:X509Token>
(P013)            </wsp:Policy>
(P014)          </sp:InitiatorToken>
(P015) ...
(P016)        </sp:AsymmetricBinding>
(P017) ... </wsp:All>
(P018)  </wsp:ExactlyOne>
(P019) </wsp:Policy>
```

Example 3.9 Client Nested compatible/incompatible policy example
Client

```
(P001)    <wsp:Policy xmlns:wsp="..." xmlns:sp="...">
(P002)      <sp:SupportingTokens>
(P003)        <wsp:Policy> [nested policy c1]
(P004)          <sp:UsernameToken> [parent policy assertion]
(P005)            <wsp:Policy> [nested policy c2]
(P006)              <sp:RequireExplicitDerivedKeys/>
```

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Deleted: (Example 3.6)
Deleted: (Example 3.7)
Deleted: [illustrated in Example 3.6]
Deleted: (illustrated in Example 3.7)
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¶
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<wsp:ExactlyOne>¶
<xx:Assertion A>¶
<wsp:Policy> <!-- Nested policy 1 -->¶
<wsp:ExactlyOne> ¶
<xx:Assertion B> <!-- Nested alternative -->¶
<xx:Assertion C>¶
</wsp:ExactlyOne>¶
</wsp:Policy>¶
<xx:Assertion E>¶
<wsp:Policy> <!-- Nested policy 2 -->¶
<wsp:ExactlyOne>¶
<xx:Assertion B> <!-- Nested alternative -->¶
<xx:Assertion C>¶
<wsp:ExactlyOne>¶
</wsp:Policy>¶
</wsp:ExactlyOne>¶
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```
(P007)            </wsp:Policy>
(P008)          </sp:UsernameToken>
(P009)        </wsp:Policy>
(P010)      </sp:SupportingTokens>
(P011)    </wsp:Policy>
```

<!-- Note: This example illustrates incompatibility only.-->

In this scenario as illustrated in Examples 3.8 and 3.9, the RequireExplicitDerivedKeys assertion is incompatible in the nested policy expressions of the policy alternatives that exist in the parent and client policies. In Example 3.8, the nested policy expression that contains the RequireExplicitDerivedKeys assertion that exists in parent policy X509Token assertion, has a different top level QName than that of Example 3.9. Therefore, the nested policy expression RequireExplicitDerivedKeys [in b3] assertion in the parent policy X509Token assertion of the AsymmetricBinding assertion in Example 3.8 is not compatible with the nested policy expression RequireExplicitDerivedKeys assertion [in c2] in the nested policy expression in the UserNameToken parent policy assertion of the SupportingTokens assertion in Example 3.9. The two occurrences of the RequireExplicitDerivedKeys assertion in the nested policy expressions have different parents and different top level QNames.

…

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<wsp:Policy>¶
<xx:Assertion A>¶
<wsp:Policy> <!-- Nested policy 3 -->¶
<xx:Assertion B> <!-- Nested alternative -->¶
</wsp:Policy>¶
</wsp:Policy>¶

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```
<wsp:Policy>
  <wsp:ExactlyOne>
      <xx:Assertion A>
          <wsp:Policy> <!-- Nested policy 1 -->
              <wsp:ExactlyOne>
                  <xx:Assertion B> <!-- Nested alternative -->
                  <xx:Assertion C>
              </wsp:ExactlyOne>
          </wsp:Policy>
      <xx:Assertion E>
          <wsp:Policy> <!-- Nested policy 2 -->
              <wsp:ExactlyOne>
                  <xx:Assertion B> <!-- Nested alternative -->
                  <xx:Assertion C>
              <wsp:ExactlyOne>
          </wsp:Policy>
  </wsp:ExactlyOne>
</wsp:Policy>
```