

```

Sub msgchk()
Dim i, j, iError
Set r = range("A1")
i = 1
iError = 0
Do Until IsEmpty(r.Cells(i, 1))
    .....
    'check message tag
    .....
    If (r.Cells(i, 1) >= 1000000 And r.Cells(i, 1) <= 1999999) Then
        'MsgBox "E011: system message are ignored."
    ElseIf (r.Cells(i, 47) = "NRMS7PMC.NLL") Then
        'MsgBox "E012: chronological messages are ignored."
    ElseIf (IsEmpty(r.Cells(i, 35)) Or Trim(r.Cells(i, 35)) = "" Or IsEmpty(r.Cells(i, 36))) Then
        iError = iError + 1
        MsgBox "E002: Message tag not defined! " & "msgnr= " & r.Cells(i, 1) & " (line" & i & ") "
    Else
        j = i + 1
        Do Until IsEmpty(r.Cells(j, 1))
            If (r.Cells(j, 1) >= 1000000 And r.Cells(j, 1) <= 1999999) Then
                'MsgBox "E111: system message are ignored."
            ElseIf (r.Cells(i, 35) = r.Cells(j, 35)) And (r.Cells(i, 36) = r.Cells(j, 36)) Then
                iError = iError + 1
                MsgBox "E001: Duplicate message tag! " & "msgnr= " & r.Cells(i, 1) & " (line" & i & ") " &
" msgvar= " & r.Cells(i, 35) & "." & r.Cells(i, 36) & " ==> msgnr: " & r.Cells(j, 1) & " (line" &
j & ")"
                End If
            j = j + 1
        Loop 'j
        End If

    .....
    'check acknowledge tag
    .....
    If (r.Cells(i, 1) >= 1000000 And r.Cells(i, 1) <= 1999999) Then
        'MsgBox "E211: system message are ignored."
    ElseIf (r.Cells(i, 47) = "NRMS7PMC.NLL") Then
        'MsgBox "E212: chronological messages are ignored."
    ElseIf (IsEmpty(r.Cells(i, 37)) Or IsEmpty(r.Cells(i, 38)) Or Trim(r.Cells(i, 37)) = "") Then
        iError = iError + 1
        MsgBox "I202: Acknowledge tag not used! " & "msgnr= " & r.Cells(i, 1) & " (line" & i & ") "
    Else
        j = i + 1
        Do Until IsEmpty(r.Cells(j, 1))
            If (r.Cells(j, 1) >= 1000000 And r.Cells(j, 1) <= 1999999) Then
                'MsgBox "E211: system message are ignored."
            ElseIf (r.Cells(i, 37) = r.Cells(j, 37)) And (r.Cells(i, 38) = r.Cells(j, 38)) Then
                iError = iError + 1
                MsgBox "E201: Duplicate acknowledge tag! " & "msgnr= " & r.Cells(i, 1) & " (line" & i & ") " &
" & " ackvar= " & r.Cells(i, 37) & "." & r.Cells(i, 38) & " ==> msgnr: " & r.Cells(j, 1) & " (line" &
" & j & ")"
                End If
            j = j + 1
        Loop 'j
        End If

    .....
    'check status tag
    .....
    If (r.Cells(i, 1) >= 1000000 And r.Cells(i, 1) <= 1999999) Then
        'MsgBox "E011: system message are ignored."
    ElseIf (IsEmpty(r.Cells(i, 39)) Or IsEmpty(r.Cells(i, 40)) Or Trim(r.Cells(i, 39)) = "") Then
        iError = iError + 1
        MsgBox "I302: Status tag not used! " & "msgnr= " & r.Cells(i, 1) & " (line" & i & ") "
    Else
        j = i + 1
        Do Until IsEmpty(r.Cells(j, 1))
            If (r.Cells(j, 1) >= 1000000 And r.Cells(j, 1) <= 1999999) Then
                'MsgBox "E311: system message are ignored."
            ElseIf (r.Cells(i, 39) = r.Cells(j, 39)) And (r.Cells(i, 40) = r.Cells(j, 40)) Then
                iError = iError + 1
                MsgBox "E301: Duplicate status tag! " & "msgnr= " & r.Cells(i, 1) & " (line" & i & ") " &
" stsvar= " & r.Cells(i, 39) & "." & r.Cells(i, 40) & " ==> msgnr: " & r.Cells(j, 1) & " (line" &
j & ")"
                End If
        End If
    End If

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        j = j + 1
    Loop 'j
End If

' .....
' loop i
' .....
i = i + 1
Loop 'i
MsgBox "I910: " & iError & " error(s) found!"
End Sub
```