

**PHOTOGRAPHY AND PHOTOMONTAGE IN LANDSCAPE AND VISUAL
IMPACT ASSESSMENT
LANDSCAPE INSTITUTE ADVICE NOTE 1/11**

RESPONSE TO QUESTIONS

**RESPONSE 1/13
16-06-13**

1 INTRODUCTION

- 1.1 The question below was sent by email to Lesley Malone of the LI and the response prepared by Ian McAulay, Mike Spence, Marc van Grieken and Mark Turnbull. Ian McAulay was co-author with Mark Turnbull of Advice Note 1/11 and Ian McAulay, Mike Spence, Marc van Grieken and Mark Turnbull comprise the LI Technical Committee's Sub-group dealing with amongst other things Photography and Photomontage.
- 1.2 As Chair of the Technical Committee Mark Turnbull and Committee member Marc van Grieken have approved this response on the Committee's behalf.

2 QUESTION

“My query relates to the image size/scale. The baseline photography we use is captured using a Nikon D90 (23.6 x 15.8mm sensor size). The lens used is a Nikon DX 18-135mm zoom lens, set to 50mm.

I have a concern that the size of the image is altered prior to us receiving it, but don't know enough about this to confirm otherwise. My concern is that the image used is automatically 'scaled' to a 35mm equivalent size, and is therefore larger than it should be when brought into the photo manipulation software.”

3 RESPONSE

None of the Sub-group is fully conversant with the Nikon range of cameras, however we do not think the D90 is a full frame sensor model. A full frame sensor would have a 36x24mm sensor.

Given a sensor size of 23.6 x 15.8mm there is a crop factor of 1.52542373 which will give the correct horizontal angle of view as a 50mm fixed lens on a full frame sensor camera. That means that using a zoom lens this should have been set to approx 32.77mm to get the equivalent of a 50mm lens on a full frame sensor camera ($50\text{mm}/1.52542373=32.77\text{mm}$). However in practice there is no way a zoom lens could be set to that degree of accuracy.

As the zoom has been set to 50mm then the resultant image will be approximately equivalent to a 75mm lens on a full frame sensor camera.

The use of a camera with full frame sensor and a 50mm fixed lens would avoid the requirement of these calculations and the potential for inaccuracy particularly when using a zoom lens.